

The 2007 Iowa Health Fact Book

The University of Iowa

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Welcome to the 2007 Iowa Health Fact Book!

This book is the sixth in a series of Iowa Health Fact Book biennial publications and has been produced as a collaborative effort between The University of Iowa College of Public Health and the Iowa Department of Public Health. Designed to be a broad-ranging report, the Iowa Health Fact Book summarizes many health and health related behaviors of Iowans. Much of this information is presented for each of Iowa's 99 counties and includes such knowledge as data on disease incidence and mortality, health and social behaviors, health resources, and environmental factors. With this book, we present a tool that is useful to Iowa's health care providers, health policy-makers, public health practitioners, and health researchers alike.

The Iowa Health Fact Books in 1997, 1999, 2001, 2003, and 2005 were distributed to registrants at the Governor's Conference on Public Health (Barn Raisings I, II, III, IV, and V) in either print or CD-ROM format. This year, all participants of the Barn Raising VI, to be held in August 2007, will again receive the CD-ROM version free. A limited number of printed copies of the 2007 edition will be available for those who prefer a bound book. This edition, along with previous editions, is posted on our college website. Note that the pages of the book can be printed from the CD-ROM files or from PDF files on our website.

The format of the 2007 Fact Book follows closely to that of the past editions, allowing users the ability to track changes over time. As we continue this effort over the years, we are in a better position to track changes longitudinally. Like the previous editions, we present the data in a descriptive format, without analysis and interpretation of trends. The interested reader is free to use these data in his/her own analyses, and is encouraged to do so with care and attention paid to analytic issues such as small counts and possible changes in the way the data are collected. The data source is given for each type of information presented, and those responsible for collecting the data can address any questions you may have. You will also find a list of other health information resources and their contact information in the Appendix.

We are pleased to make this rich source of health information available to the public and hope that you find it useful.

Sincerely,

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Table of Contents

Introduction	1
Introduction	1
Fact Book Conventions	2
 Healthy Iowans 2010 Leading Indicators	 5
 Demographics	 9
Introduction to the Demographics Section	9
State Population Distributions 1997-2006.....	10
Average Annual Population Distribution by Age 1996-2004.....	14
Aging Trend in Iowa	16
Estimated Year 2000 U.S. Standard Population.....	16
 Health and Social Behaviors	 17
Introduction to the Health and Social Behaviors Section	17
Introduction to the Behavioral Risk Factor Surveillance System (BRFSS).....	18
Iowa Behavioral Risk Factor Surveillance System (BRFSS) 2004-2005.....	19
2006 Iowa Adult Tobacco Survey (ATS).....	20
Substance Abuse Treatment	21
Marriages 2004-2005	22
Dissolutions 2004-2005.....	23
 Prenatal and Infant Health	 25
Introduction to the Prenatal and Infant Health Section	25
Live Births 2004-2005	26
Out-of-Wedlock Births 2004-2005.....	27
Mothers Under Age 20 2004-2005.....	29
Low Birth Weight (< 2500 Grams) 2004-2005	30
Mothers Who Began Prenatal Care in the First Trimester 2004-2005	32
Mothers Who Smoked During Pregnancy 2004-2005	34
Mothers Who Drank During Pregnancy 2004-2005.....	35
Fetal Deaths 2004-2005.....	37
Neonatal Deaths 2004-2005	38
Perinatal Deaths 2004-2005	40
Infant Deaths 2004-2005.....	41
Birth Defects 2002-2004	43
Selected Birth Defects in Iowa 2002-2004.....	45
 Infectious Diseases.....	 47
Introduction to Infectious Diseases Section.....	47
Sexually Transmitted Diseases 2005-2006	48
Selected Infectious Diseases 1998-2006.....	50
 Cancer Incidence and Mortality	 51
Introduction to Cancer Incidence and Mortality Section	51
All Sites of Cancer Incidence 1996-2004.....	52
All Sites of Cancer Mortality 1996-2004.....	54
Prostate Cancer Incidence 1996-2004	56

Prostate Cancer Mortality 1996-2004	58
Lung Cancer Incidence 1996-2004	60
Lung Cancer Mortality 1996-2004	62
Female Breast Cancer Incidence 1996-2004	64
Female Breast Cancer Mortality 1996-2004	66
Colorectal Cancer Incidence 1996-2004	68
Colorectal Cancer Mortality 1996-2004	70
Non-Hodgkin's Lymphoma Incidence 1996-2004	72
Non-Hodgkin's Lymphoma Mortality 1996-2004	74
Leukemia Incidence 1996-2004	76
Leukemia Mortality 1996-2004	78
Skin Melanoma Incidence 1996-2004	80
Skin Melanoma Mortality 1996-2004	82
Oral Cavity (Excluding Lip) Cancer Incidence 1996-2004	84
Oral Cavity (Excluding Lip) Cancer Mortality 1996-2004	86
Cervical Cancer Incidence 1996-2004	88
Cervical Cancer Mortality 1996-2004	90

Injury Mortality 93

Introduction to Injury Mortality Section	93
All Transportation Mortality 1996-2004	94
Motor Vehicle Traffic Mortality 1996-2004	96
Suicides 1996-2004	98
Firearms Mortality 1996-2004	100
Falls Mortality 1996-2004	102
Homicides 1996-2004	104
Poisoning Mortality 1996-2004	106
Burns Mortality 1996-2004	108
Drowning Mortality 1996-2004	110
All Other Unintentional Mortality 1996-2004	112

Youth Injury Mortality 115

Introduction to the Youth Injury Mortality Section	115
Age 0-14: All Transportation Mortality 1996-2004	116
Age 15-19: All Transportation Mortality 1996-2004	117
Age 0-14: Motor Vehicle Traffic Mortality 1996-2004	119
Age 15-19: Motor Vehicle Traffic Mortality 1996-2004	120
Age 0-14 & 15-19: Suicides by County Group 1979-2004	122
Age 0-14 & 15-19: Homicides by County Group 1979-2004	123

Other Mortality..... 125

Introduction to Other Mortality Section	125
All Causes Mortality 1996-2004	126
Heart Disease Mortality 1996-2004	128
Stroke Mortality 1996-2004	130
Chronic Obstructive Pulmonary Disease Mortality 1996-2004	132
Pneumonia / Influenza Mortality 1996-2004	134
Diabetes Mellitus Mortality 1996-2004	136
Atherosclerosis Mortality 1996-2004	138
Infectious / Parasitic Mortality 1996-2004	140
Nephritis, Nephrotic Syndrome, Nephrosis Mortality 1996-2004	142
Chronic Liver Disease and Cirrhosis Mortality 1996-2004	144
Congenital Anomalies Mortality 1996-2004	146
Conditions Originating in Perinatal Period Mortality 1996-2004	148
Alzheimer's Mortality 1996-2004	150

Health Care Providers..... 153

Introduction to Health Care Providers Section.....	153
Total Physicians 2007	154
Primary Care Physicians 2007	155
Family Practice Physicians 2007	156
Internal Medicine Physicians 2007	157
Pediatric Physicians 2007	158
Obstetrics / Gynecology Physicians 2007.....	159
General Surgeons 2007	160
Other Specialty Physicians 2007	161
Physician Assistants 2007	162
Advanced Practical Nurses 2007	163
Pharmacists 2007	164
Dentists 2007	165
Emergency Care Providers – Total 2007	166
First Responders 2007	167
Emergency Medical Technicians – Basic 2007	168
Emergency Medical Technicians – Intermediate 2007	169
Emergency Medical Technicians – Paramedics 2007	170
Emergency Medical Technicians – Paramedic Specialists 2007.....	171

Health Care Facilities 173

Introduction to Health Care Facilities Section	173
Community and Migrant Health Centers	174
Certified Rural Health Clinics	174
Hospitals 2007	175
Hospital Beds 2007	176
Nursing Facilities 2007	177
Nursing Facility Beds 2007	178
Chronic Confusion or Dementing Illness Units 2007	179
Beds in Chronic Confusion or Dementing Illness Units 2007	180
Intermediate Care Facilities for the Mentally Retarded 2007.....	181
Intermediate Care Beds for the Mentally Retarded 2007	182
Residential Care Facilities 2007	183
Beds in Residential Care Facilities 2007	184
Residential Care Facilities for Persons with Mental Illness 2007	185
Beds in Residential Care Facilities for Persons with Mental Illness 2007	186
Residential Care Facilities for the Mentally Retarded 2007.....	187
Beds in Residential Care Facilities for the Mentally Retarded 2007.....	188
3-5 Bed Units for the Mentally Retarded 2007.....	189
Beds in 3-5 Bed Units for the Mentally Retarded 2007.....	190
Psychiatric Medical Institutions for Children 2007	191
Beds in Psychiatric Medical Institutions for Children 2007	192
Total Trauma Care Facilities 2007	193
Community Trauma Care Facilities 2007.....	194
Area Trauma Care Facilities 2007	195
Regional Trauma Care Facilities 2007.....	196
Resource Trauma Care Facilities 2007	197

Environmental Health Indicators 199

Introduction to Environmental Health Indicators Section	199
Childhood Blood Lead Poisoning Introduction.....	200
Percent of Children Tested for Blood Lead Poisoning, 1999-2000	202
Elevated Levels of Blood Lead: Children Born in 1999	203
Elevated Levels of Blood Lead: Children Born in 2000	204
Elevated Levels of Blood Lead: Children Born in 1999-2000	205

Appendix I: Data Sources..... 207

Appendix II: Glossary of Terms 213

Appendix III: Coding and Classifications..... 219

Appendix IV: Iowa Health Data Information Resources..... 223

Introduction

In the 2007 Iowa Health Fact Book, state-wide data relating to health outcomes, social and health behaviors, and health care resources are presented, generally at the county level. The data have been compiled in this book, but were collected using different methodologies by various organizations and reporting mechanisms. We encourage readers who would like to use these data to learn about the data collection processes and data definitions from those responsible for collecting the information. The use of U.S. Census data to compute adjusted rates, sparse data concerns, data groupings, data definitions, and use of ranks are described in the Fact Book Conventions section of this Introduction.

The second section, Healthy Iowans 2010 Leading Indicators, outlines the major public health mortality concerns in Iowa and provides both baseline values and target values. Current levels have been included to show the progress toward those goals. Demographics are provided in the third section, listing county-specific population estimates in Iowa for the years 1997 – 2006. These population totals drive the calculation of crude and age-adjusted rates in later sections.

The remaining ten sections provide valuable information on a variety of aspects of the health of Iowans. The Health and Social Behaviors section tracks behaviors affecting our health, including the 2006 Iowa Adult Tobacco Survey. The Prenatal and Infant Health section covers information regarding infants, but also the well-being of their mothers during pregnancy. The Infectious Diseases section focuses mainly on sexually transmitted diseases, although other infectious disease data are presented as well. The Cancer Incidence and Mortality section provides both crude and age-adjusted rates for selected major types of cancer. The Injury Mortality section reveals both crude and age-adjusted rates for certain causes of mortality, such as motor vehicle deaths and deaths caused by firearms. Closely related is the Youth Injury Mortality section, providing the same type of data but restricted to individuals aged less than 20. The last mortality section, Other Mortality, lays out crude and age-adjusted rates for mortality not caused by cancer or the causes listed in the previous two sections. A component of a good health care system is adequate capacity of both facilities and health care providers. The Health Care Providers chapter shows counts and crude rates of various types of providers across the state. The Health Care Facilities chapter details counts and crude rates for a variety of types of facilities. The final section of the book, entitled Environmental Health Indicators, focuses exclusively on the testing of blood lead poisoning of children in Iowa.

Fact Book Conventions

Layout

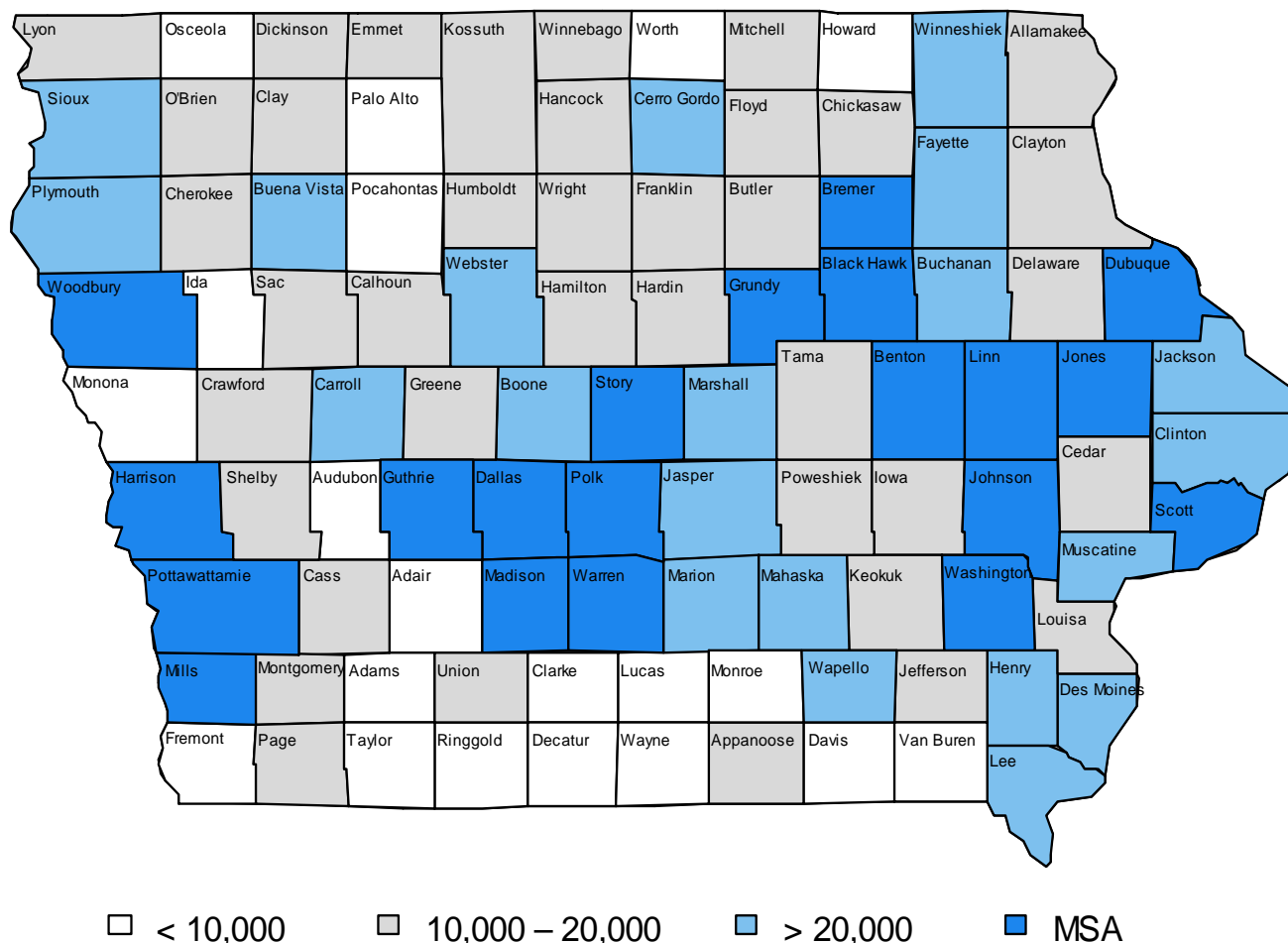
The time interval covered differs across the data items, mainly due to differences in data availability. Where reasonable and possible, county-specific data are presented. When it is not presented in that format, it is either because the data were too sparse (that is, a relatively small number of counties with non-zero counts) or they were not available at the county level. Since many of the data items presented would be expected to vary with county population size, the counties have been organized into groups based on their county population size. Both crude and age-adjusted population rates are presented when reasonable, which also facilitates comparisons across counties. For data items in which historical counts earlier than those presented in this book are available, line graphs showing time trends by county grouping are presented as well.

Four County Groupings

An MSA (Metropolitan Statistical Area) county is defined by the U. S. Census Bureau as a central city along with the counties economically and socially connected to it. Each MSA must have one city with at least 50,000 inhabitants or a Census-defined urbanized area with a total metropolitan population of at least 100,000 (75,000 in New England). Under the year 2000 standards, rural counties may be included in an MSA if at least 25 percent of the workers who live in the county work within the central county or counties (that is, the county or counties containing the urban core of 50,000 or more population) of the MSA. A county can also be included if at least 25 percent of the jobs in the county are filled by workers living in the central counties of the MSA. This definition was updated following the 2000 Census resulting in many newly classified MSA counties.

There were twenty counties defined by the U. S. Census Bureau as MSA from the 2000 Census. For the seventy-nine other counties, using the 1997-2006 average county population, there were 20 counties with less than 10,000 residents, 38 counties with 10,000 to 20,000 residents and 21 counties with 20,000 to 50,000 residents. See the map on the following page to identify the counties in each group.

County Group Based on 1997-2006 Average Population



Small Numbers

If the number of county-specific events in a health outcome table was less than five, we masked the count by replacing it with an asterisk (*) to protect subject confidentiality. However, all numbers are included in the computations needed for the line graphs and other charts accompanying the health outcomes tables, which summarizes data over a larger number of people. If only one value in a county grouping is masked with an (*), then we do not report the grouping total, only a range of possible values.

Population Standard

The Year 2000 Estimated United States Standard Million Population from the United States Census Bureau has been used for adjustment purposes.

Adjustment Calculations

Both crude and age-adjusted rates have been calculated and presented in many of the data tables. Crude rates for an entity (e.g., county) are the number of events of a health outcome divided by the population at risk in the county. The age-adjusted rates used in this book are a weighted average of the age-specific rates from the targeted population (e.g., county), where the weights are the proportions of persons in the corresponding age groups of a standard population. As stated above, the Year 2000 United States population was used as the standard population. If data only represent one age group then the age-adjusted rate is identical to the crude rate and thus not reported (e.g., Live Births).

There are no hard and fast rules as to when one should use either the crude or the adjusted rate for comparisons. A few guidelines can, however, be noted. A crude rate for a county reflects the disease or mortality burden for a county and may be useful to the health policy makers in the county. If a county has a relatively high proportion of elderly and the disease is associated with older individuals, crude rates will reflect that higher burden due to greater numbers of elderly. The age-adjusted rate is also useful as a county comparison index, but after putting both counties on the same playing field with respect to the age distribution in each. These rates have been adjusted to the same standard population, so the effect of differing age distributions in two counties is eliminated before the comparison is made. Hence, both are useful descriptive indices of diseases, but with differences in interpretation.

Ranks

The county rank represents the ranking of the county among the 99 counties of Iowa, with a rank of “1” given to the county with the largest rate and “99” to the county with the smallest rate. In general, ranks were presented for a data table when no counts in the table were less than five; i.e. when there were no very small numbers.

Maps

State maps were created to present the data for Health Care Providers and Health Care Facilities instead of tables. The number in the county represents the 2007 count. The crude rates were calculated from the estimated 2006 county population. These rates were grouped into four categories of approximately twenty-five counties each and shaded on the map. If a county rate fell on the border between two categories, it was shaded using the smaller region.

Healthy Iowans 2010 Leading Indicators



Healthy Iowans 2010, Iowa's master plan for health, drew on the expertise and experience of hundreds of Iowans who reviewed data from many sources before setting goals and action steps. Published in January 2000, *Healthy Iowans 2010* is a companion to *Healthy People 2010*, the federal plan aimed at preventing disease and promoting health. Both plans drive funding.

In July 2005, a midcourse revision was published and was a product of about 425 people from public, private, and non-profit entities. There are 25 chapters, a team for each chapter, 217 goals, and more than 430 action steps. To reach the goals, teams crafted specific action steps to be taken with a time line for each step and an organization responsible for the action. Each year, the organizations that agreed to take action that year are asked to report progress. A tracking system, an integral part of implementation, assures accountability.

New to the updated plan are chapters on vision and on emergency preparedness and response, a glossary of acronyms, and goal cross references at the end of each chapter. Each chapter is introduced with a progress report on what *Healthy Iowans 2010* steps have been taken and goals achieved during the first part of the decade. Special attention in each chapter is paid to the Olmstead decision, a US Supreme Court decision requiring (1) Government services to be delivered in a way that avoids discrimination against people with disabilities and (2) States to administer programs, services, and activities in the most integrated setting appropriate to the needs of qualified people with disabilities.

What continues is the idea that when stakeholders decide on disease prevention and health promotion strategies and agree to work together on them, all Iowans benefit. In making those decisions, the teams analyzed relevant data. A database has been published on the Iowa Department of Public Health Web site: www.idph.state.ia.us.

The following pages contain many of the goals based on mortality data analysis. We report the baseline value as stated in the midcourse revision, the most current level of the indicator, and the 2010 target level. For 13 of the 16 goals, the most current levels indicate progress is being made toward reaching the 2010 target level. For motor vehicle fatalities, the 2010 goal has already been surpassed given the current level rate.

Healthy Iowans 2010 Mortality Goals

Mortality Goals (Chapter-Section)	Goal Statement	Baseline rate ¹ (year)	Current rate ¹ (year)	Midcourse Revision 2010 Goal ¹
Cancer				
Lung cancer (2-4)	Reduce lung cancer deaths to a rate of no more than 46.0 per 100,000	54.1 (1994-1996)	52.3 (2002-2004)	46.0
Breast cancer (2-5)	Reduce female breast cancer deaths to a rate of no more than 19.0 per 100,000 females	29.0 (1994-1996)	23.3 (2002-2004)	19.0
Cervical cancer (2-6)	Reduce cervical cancer deaths to a rate of no more than 1.9 per 100,000 females	2.6 (1994-1996)	2.4 (2002-2004)	1.9
Colorectal cancer (2-7)	Reduce colorectal cancer deaths to a rate of no more than 15.5 per 100,000	23.2 (1994-1996)	19.4 (2002-2004)	15.5
Oral cavity cancer (2-8)	Reduce oral cavity and pharyngeal cancer deaths to a rate of no more than 1.8 per 100,000	2.6 (1994-1996)	2.4 (2002-2004)	1.8
Prostate cancer (2-9)	Reduce prostate cancer deaths to a rate of no more than 26.0 per 100,000	36.0 (1994-1996)	27.7 (2002-2004)	26.0
Skin melanoma (2-10)	Reduce skin melanoma (<u>malignant cancer</u>) deaths to a rate of no more than 1.9 per 100,000	2.5 (1994-1996)	2.3 (2002-2004)	1.9

¹Age-adjusted Rates per 100,000 population

Source: State Health Registry of Iowa

Healthy Iowans 2010 Mortality Goals (continued)

Mortality Goals (Chapter-Section)	Goal Statement	Baseline rate (year)	Current rate (year)	Midcourse Revision 2010 Goal
Diabetes Diabetes (3-4)	Decrease death and disability with diabetes as the primary cause to 16.0 per 100,000 people in 2010 (480 per year)	24.8 ¹ (2002)	24.3 ¹ (2005)	16.0 ¹
Heart Disease and Stroke Coronary heart disease (9-1)	Reduce by 13% heart disease deaths among all Iowans	266 ¹ (2003)	250.4 ¹ (2005)	232.0 ¹
Stroke (9-2)	Reduce by 16% stroke deaths among all Iowans	70.4 ¹ (2003)	64.0 ¹ (2005)	59.0 ¹
Maternal, Infant, and Child Health Infant (11-1)	Reduce the overall infant mortality rate to no more than 5 per 1,000 live births	6.0 ² (1998)	5.3 ² (2005)	5.0 ²
Perinatal mortality (11-8)	Reduce the overall perinatal mortality rate to no more than 7.1 per 1,000 live births plus fetal deaths	8.4 ² (2002)	8.7 ² (2005)	7.1 ²
Unintentional Injuries Falls (22-2)	Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people	11.5 ¹ (1997)	10.6 ¹ (2005)	2.3 ¹
Unintentional Injuries Poisoning (22-8)	Reduce deaths in Iowa caused by unintentional poisoning to 1.0 per 100,000 people (30 per year).	1.9 ¹ (2001)	3.5 ¹ (2005)	1.0 ¹
Fire (22-9)	Reduce Iowa's fire death rate to less than one per 100,000 people	1.7 ¹ (1990-1999)	1.1 ¹ (2005)	< 1.0 ¹
Motor vehicle crashes (22-10)	Reduce deaths by motor vehicle crashes to no more than 5.6 per 100,000 people in children aged 14 and younger	6.3 ¹ (1994)	4.3 ¹ (2005)	5.6 ¹

¹Crude Rates per 100,000 population²Crude Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

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Demographics

Many of the health indicators in the 2007 Iowa Health Fact Book are presented with rates calculated using the population of the county and state. These rates are also stratified into population subgroups based on a 10-year average of each county's population. This not only contrasts the rural and urban aspects of the state but also includes trends in age and ethnic distribution of the population. The Year 2000 U.S. standard population age distribution is used for calculating age-adjusted rates. Population estimates have been obtained from the U.S. Census and from the State Health Registry of Iowa via the National Cancer Institute's SEER*Stat software program. Estimates are used for individual years and for year groupings where appropriate.

KEY FEATURES IN IOWA DEMOGRAPHICS...

- ✓ Increasing urbanization
- ✓ Females represent 50.8% of population
- ✓ Median age 38.6 years
- ✓ Over 65 represents 14% of population

The population in Iowa is becoming increasingly urbanized. Using the 2000 Census, twenty counties were defined as Metropolitan Statistical Areas (MSA) doubling the previous number of ten MSA defined counties. The Metropolitan Statistical Areas are Ames (Story County), Cedar Rapids (Benton, Jones, Linn Counties), Des Moines (Dallas, Guthrie, Madison, Polk, Warren Counties), Dubuque (Dubuque County), Iowa City (Johnson, Washington Counties), Omaha-Council Bluffs (Harrison, Mills, Pottawattamie Counties), Sioux City (Woodbury County), Waterloo-Cedar Falls (Black Hawk, Bremer, Grundy Counties). Over 55% of the 2006 estimated Iowa population of 2,982,085 lived in MSA counties. The population of Iowa is expected to exceed 3 million by 2010.

CHARACTERISTICS OF RACE / ETHNICITY

White	93.5%
Black or African American	2.2%
Asian	1.5%
Some other race or races	2.8%
Hispanic or Latino (of any race)	3.7%

The distribution of the population by age is different among the county groupings. The larger counties have a greater percentage of their population as young adults (15-44 years) compared to the

smaller counties. Conversely, the smaller counties have a larger percentage of persons 65 years of age or older. These differences in age distributions are standardized through age-adjustment so risk factors other than age can be compared. As shown, the population of the state has become older since 1970. The percent of Iowans age 65 and older increased steadily through the early 1990's, but has slightly decreased since then.

State Population Distributions

Estimated Annual Population Distribution 1997-2006

	County	1997	1998	1999	2000	2001	2002	2003
Counties with Average Population < 10,000	Adair	8,310	8,305	8,298	8,243	8,095	8,003	7,961
	Adams	4,503	4,493	4,498	4,482	4,415	4,386	4,371
	Audubon	6,916	6,893	6,896	6,830	6,663	6,587	6,487
	Clarke	8,701	8,841	8,908	9,133	9,164	9,158	9,216
	Davis	8,496	8,484	8,518	8,541	8,633	8,624	8,575
	Decatur	8,416	8,538	8,646	8,689	8,698	8,630	8,581
	Fremont	7,989	7,993	7,997	8,010	7,916	7,838	7,819
	Howard	9,966	9,999	9,950	9,932	9,895	9,854	9,792
	Ida	8,024	7,928	7,914	7,837	7,690	7,614	7,508
	Lucas	9,395	9,422	9,461	9,422	9,445	9,452	9,494
	Monona	10,121	10,047	10,056	10,020	9,861	9,757	9,795
	Monroe	8,132	8,080	8,061	8,016	7,925	7,800	7,850
	Osceola	7,167	7,087	7,049	7,003	6,945	6,839	6,802
	Palo Alto	10,254	10,245	10,137	10,147	10,042	9,886	9,740
	Pocahontas	8,864	8,859	8,808	8,662	8,513	8,387	8,232
	Ringgold	5,447	5,441	5,449	5,469	5,423	5,332	5,346
	Taylor	7,016	7,029	6,905	6,958	6,869	6,827	6,750
	Van Buren	7,736	7,774	7,784	7,809	7,743	7,801	7,732
	Wayne	6,910	6,821	6,738	6,730	6,660	6,652	6,630
	Worth	7,929	7,926	7,890	7,909	7,832	7,793	7,726
	Total	160,292	160,205	159,963	159,842	158,427	157,220	156,407
Counties with Average Population 10,000 – 20,000	Allamakee	14,487	14,611	14,651	14,675	14,413	14,452	14,600
	Appanoose	13,677	13,761	13,709	13,721	13,622	13,451	13,616
	Butler	15,501	15,406	15,286	15,305	15,156	15,015	15,006
	Calhoun	11,377	11,296	11,190	11,115	11,001	10,812	10,652
	Cass	14,886	14,794	14,649	14,684	14,573	14,310	14,367
	Cedar	18,102	18,057	18,178	18,187	18,120	18,171	18,239
	Cherokee	13,381	13,204	13,096	13,035	12,925	12,676	12,529
	Chickasaw	13,272	13,237	13,209	13,095	13,087	12,858	12,687
	Clay	17,662	17,550	17,339	17,372	17,283	17,075	16,976
	Clayton	18,952	18,900	18,825	18,678	18,532	18,379	18,340
	Crawford	16,864	16,901	16,911	16,942	16,961	16,993	16,904
	Delaware	18,380	18,487	18,444	18,404	18,296	18,293	18,188
	Dickinson	16,076	16,236	16,333	16,424	16,479	16,413	16,414
	Emmet	11,303	11,247	11,103	11,027	10,890	10,825	10,729
	Floyd	17,059	16,987	16,959	16,900	16,642	16,616	16,572
	Franklin	10,921	10,875	10,780	10,704	10,654	10,684	10,672
	Greene	10,402	10,442	10,394	10,366	10,172	10,178	10,104
	Hamilton	16,371	16,405	16,387	16,438	16,269	16,305	16,304
	Hancock	12,043	12,085	12,091	12,100	11,950	11,832	11,861
	Hardin	18,981	18,912	18,784	18,812	18,625	18,429	18,265
	Humboldt	10,473	10,462	10,414	10,381	10,325	10,136	10,114
	Iowa	15,423	15,463	15,570	15,671	15,831	15,818	15,946
	Jefferson	16,628	16,553	16,282	16,181	16,110	15,963	16,000
	Keokuk	11,444	11,406	11,317	11,400	11,380	11,408	11,329
	Kossuth	17,552	17,321	17,258	17,163	16,814	16,593	16,433
	Louisa	12,050	12,114	12,174	12,183	12,214	12,219	12,212
	Lyon	11,811	11,863	11,812	11,763	11,668	11,694	11,709
	Mitchell	10,941	10,863	10,895	10,874	10,747	10,861	10,857
	Montgomery	11,889	11,890	11,767	11,771	11,536	11,363	11,306
	O'Brien	15,498	15,457	15,200	15,102	14,916	14,754	14,717

State Population Distributions (continued)

Estimated Annual Population Distribution 1997-2006								
Counties with Average Population < 10,000	County	2004	2005	2006	Percent Change ¹	Ten Year Average ²	Male ³	Female ³
	Adair	7,875	7,795	7,714	-6.4%	8,060	3,992	4,169
	Adams	4,307	4,223	4,192	-6.5%	4,387	2,189	2,254
	Audubon	6,465	6,363	6,278	-8.1%	6,638	3,241	3,501
	Clarke	9,239	9,118	9,156	0.3%	9,063	4,414	4,599
	Davis	8,665	8,597	8,602	0.7%	8,574	4,233	4,321
	Decatur	8,613	8,645	8,656	-0.4%	8,611	4,194	4,393
	Fremont	7,736	7,698	7,737	-3.4%	7,873	3,874	4,058
	Howard	9,784	9,721	9,677	-2.6%	9,857	4,888	5,020
	Ida	7,417	7,342	7,180	-8.4%	7,645	3,780	3,997
	Lucas	9,665	9,627	9,543	1.3%	9,493	4,579	4,869
	Monona	9,652	9,504	9,343	-6.8%	9,816	4,810	5,121
	Monroe	7,826	7,798	7,725	-3.6%	7,921	3,896	4,085
	Osceola	6,760	6,648	6,629	-5.3%	6,893	3,409	3,572
	Palo Alto	9,758	9,669	9,549	-5.9%	9,943	4,912	5,137
	Pocahontas	8,074	7,931	7,794	-10.0%	8,412	4,210	4,383
	Ringgold	5,333	5,255	5,289	-3.3%	5,378	2,619	2,791
	Taylor	6,660	6,553	6,540	-6.0%	6,811	3,334	3,569
	Van Buren	7,739	7,732	7,836	0.3%	7,769	3,859	3,898
	Wayne	6,591	6,548	6,542	-2.8%	6,682	3,215	3,528
	Worth	7,728	7,755	7,698	-2.7%	7,819	3,890	3,972
	Total	155,887	154,522	153,680	-3.9%	157,645	77,538	81,237
Counties with Average Population 10,000 – 20,000	Allamakee	14,699	14,782	14,796	0.8%	14,617	7,287	7,278
	Appanoose	13,617	13,584	13,422	-2.2%	13,618	6,545	7,112
	Butler	15,027	15,045	15,073	-1.5%	15,182	7,505	7,745
	Calhoun	10,540	10,482	10,437	-6.1%	10,890	5,502	5,541
	Cass	14,255	14,161	14,124	-3.8%	14,480	7,093	7,525
	Cedar	18,233	18,240	18,326	0.8%	18,185	8,952	9,186
	Cherokee	12,411	12,245	12,094	-7.2%	12,760	6,380	6,587
	Chickasaw	12,607	12,472	12,412	-5.2%	12,894	6,513	6,522
	Clay	16,931	16,838	16,801	-3.3%	17,183	8,371	8,945
	Clayton	18,332	18,224	18,251	-2.3%	18,541	9,230	9,422
	Crawford	16,879	16,888	16,948	0.0%	16,919	8,452	8,452
	Delaware	18,077	17,938	17,848	-3.0%	18,236	9,074	9,243
	Dickinson	16,583	16,746	16,924	3.0%	16,463	7,955	8,357
	Emmet	10,602	10,536	10,479	-5.0%	10,874	5,365	5,644
	Floyd	16,517	16,453	16,441	-2.7%	16,715	8,112	8,695
	Franklin	10,730	10,759	10,708	0.0%	10,749	5,299	5,482
	Greene	10,070	9,962	9,809	-5.4%	10,190	4,999	5,262
	Hamilton	16,226	16,223	16,087	-2.1%	16,302	8,079	8,261
	Hancock	11,794	11,758	11,680	-3.5%	11,919	5,896	6,096
	Hardin	18,109	17,925	17,791	-5.4%	18,463	9,146	9,529
	Humboldt	10,083	10,001	9,975	-3.9%	10,236	5,045	5,264
	Iowa	15,958	16,054	16,140	3.0%	15,787	7,643	8,035
	Jefferson	16,038	16,000	15,945	-1.5%	16,170	7,954	8,290
	Keokuk	11,225	11,121	11,081	-2.8%	11,311	5,526	5,858
	Kossuth	16,323	16,181	16,011	-6.7%	16,765	8,330	8,682
	Louisa	12,029	11,813	11,858	-2.7%	12,087	6,040	6,104
	Lyon	11,725	11,690	11,636	-1.1%	11,737	5,827	5,936
	Mitchell	10,933	10,872	10,856	-0.2%	10,870	5,322	5,561
	Montgomery	11,314	11,364	11,365	-3.4%	11,557	5,517	6,124
	O'Brien	14,483	14,410	14,409	-4.6%	14,895	7,351	7,697

¹Percent change from 2000 to 2006²1997-2006 Average³1996-2004 Average

Source: Population Division, U.S. Census Bureau and SEER*Stat

State Population Distributions (continued)

Estimated Annual Population Distribution 1997-2006								
Counties with Average Population 10,000 – 20,000	County	1997	1998	1999	2000	2001	2002	2003
	Page	17,374	17,330	17,112	16,976	16,889	16,493	16,326
	Poweshiek	18,989	18,814	18,797	18,815	18,898	18,854	18,946
	Sac	11,882	11,852	11,686	11,529	11,365	11,056	10,892
	Shelby	13,353	13,256	13,179	13,173	13,020	12,893	12,821
	Tama	17,950	18,070	18,121	18,103	18,020	17,914	17,850
	Union	12,345	12,349	12,397	12,309	12,239	12,148	11,933
	Winnebago	11,876	11,741	11,660	11,723	11,576	11,427	11,424
	Wright	14,560	14,506	14,379	14,334	14,150	13,959	13,789
	Total	551,735	550,703	548,338	547,435	543,348	539,320	537,629
Counties with Average Population > 20,000	Boone	26,023	25,930	26,164	26,224	26,247	26,093	26,240
	Buchanan	21,084	21,088	21,158	21,093	20,957	20,855	20,910
	Buena Vista	20,427	20,301	20,508	20,411	20,240	20,300	20,260
	Carroll	21,705	21,703	21,631	21,421	21,193	21,162	21,062
	Cerro Gordo	47,091	46,950	46,637	46,447	45,733	45,330	45,235
	Clinton	50,635	50,553	50,346	50,149	49,950	49,829	49,782
	Des Moines	42,620	42,621	42,515	42,351	41,960	41,431	41,440
	Fayette	22,261	22,179	22,011	22,008	21,723	21,544	21,458
	Henry	20,033	20,285	20,351	20,336	20,350	20,093	20,262
	Jackson	20,155	20,225	20,217	20,296	20,337	20,240	20,212
	Jasper	36,087	36,898	37,096	37,213	37,451	37,591	37,690
	Lee	38,720	38,544	38,281	38,052	37,497	36,982	36,701
	Mahaska	22,126	22,266	22,400	22,335	22,380	22,350	22,051
	Marion	31,317	31,601	31,879	32,052	32,581	32,561	32,522
	Marshall	39,242	39,238	39,313	39,311	39,345	39,246	39,315
	Muscatine	41,280	41,417	41,587	41,722	41,939	42,075	42,089
	Plymouth	24,691	24,578	24,774	24,849	24,859	24,661	24,769
	Sioux	31,473	31,649	31,669	31,589	31,860	31,974	31,997
	Wapello	35,980	35,948	36,042	36,051	36,027	35,921	35,844
	Webster	39,268	39,652	40,255	40,235	40,116	39,812	39,572
	Winneshiek	21,064	21,251	21,289	21,310	21,345	21,306	21,159
	Total	653,282	654,877	656,123	655,455	654,090	651,356	650,570
MSA Counties	Benton	24,453	24,823	25,214	25,308	25,729	26,159	26,368
	Black Hawk	127,275	127,743	127,786	128,012	127,481	126,456	125,753
	Bremer	23,292	23,322	23,398	23,325	23,429	23,271	23,374
	Dallas	36,862	38,152	39,691	40,750	42,764	44,458	46,519
	Dubuque	88,996	88,775	88,934	89,143	89,216	89,571	90,635
	Grundy	12,335	12,277	12,332	12,369	12,311	12,348	12,314
	Guthrie	11,321	11,321	11,403	11,353	11,292	11,313	11,466
	Harrison	15,498	15,569	15,510	15,666	15,697	15,564	15,706
	Johnson	106,538	107,819	109,814	111,006	112,926	113,936	114,975
	Jones	20,587	20,369	20,220	20,221	20,191	20,268	20,374
	Linn	185,450	187,210	189,931	191,701	194,011	195,416	196,224
	Madison	13,585	13,702	13,898	14,019	14,192	14,417	14,575
	Mills	14,145	14,265	14,478	14,547	14,586	14,723	14,851
	Polk	360,985	365,086	370,592	374,601	380,625	385,479	389,862
	Pottawattamie	85,677	86,609	87,153	87,704	87,765	88,116	88,366
	Scott	157,228	157,754	158,765	158,668	158,778	159,111	159,349
	Story	77,833	78,221	79,372	79,981	79,602	80,784	80,331
	Warren	39,510	39,911	40,340	40,671	41,104	41,426	42,093
	Washington	20,512	20,506	20,578	20,670	21,052	21,136	21,197
	Woodbury	103,728	103,653	103,801	103,877	103,535	103,447	103,132
	Total	1,525,810	1,537,087	1,553,210	1,563,592	1,576,286	1,587,399	1,597,464

State Population Distributions (continued)

Estimated Annual Population Distribution 1997-2006								
Counties with Average Population 10,000 – 20,000	County	2004	2005	2006	Percent Change ¹	Ten Year Average ²	Male ³	Female ³
	Page	16,229	16,291	16,263	-4.2%	16,728	8,588	8,309
	Poweshiek	18,995	18,923	19,007	1.0%	18,904	9,102	9,804
	Sac	10,815	10,651	10,682	-7.3%	11,241	5,604	5,838
	Shelby	12,753	12,566	12,489	-5.2%	12,950	6,406	6,671
	Tama	17,962	17,937	17,890	-1.2%	17,982	8,822	9,155
	Union	11,974	11,978	12,093	-1.8%	12,177	5,855	6,383
	Winnebago	11,376	11,360	11,216	-4.3%	11,538	5,670	5,963
	Wright	13,677	13,601	13,419	-6.4%	14,037	6,965	7,260
	Total	536,131	534,074	532,786	-2.7%	542,150	267,322	277,818
Counties with Average Population > 20,000	Boone	26,397	26,495	26,584	1.4%	26,240	12,762	13,366
	Buchanan	21,037	21,021	21,045	-0.2%	21,025	10,439	10,588
	Buena Vista	20,154	20,103	20,091	-1.6%	20,280	10,175	10,163
	Carroll	21,015	21,015	20,963	-2.1%	21,287	10,405	10,977
	Cerro Gordo	44,794	44,594	44,384	-4.4%	45,720	22,159	23,982
	Clinton	49,787	49,744	49,782	-0.7%	50,056	24,369	25,824
	Des Moines	41,033	40,975	40,885	-3.5%	41,783	20,293	21,745
	Fayette	21,233	21,195	20,996	-4.6%	21,661	10,779	11,076
	Henry	20,228	20,379	20,405	0.3%	20,272	10,258	9,946
	Jackson	20,217	20,243	20,290	0.0%	20,243	9,973	10,268
	Jasper	37,644	37,538	37,409	0.5%	37,262	18,610	18,445
	Lee	36,697	36,519	36,338	-4.5%	37,433	18,692	19,112
	Mahaska	22,112	22,309	22,298	-0.2%	22,263	11,050	11,176
	Marion	32,610	32,738	32,987	2.9%	32,285	15,909	16,157
	Marshall	39,571	39,572	39,555	0.6%	39,371	19,427	19,845
	Muscatine	42,334	42,567	42,883	2.8%	41,989	20,682	21,075
	Plymouth	24,931	24,880	24,906	0.2%	24,790	12,314	12,455
	Sioux	32,203	32,332	32,525	3.0%	31,927	15,567	16,146
	Wapello	35,768	35,976	36,010	-0.1%	35,957	17,482	18,477
	Webster	39,186	38,963	38,960	-3.2%	39,602	19,774	19,952
	Winneshiek	21,187	21,224	21,263	-0.2%	21,240	10,460	10,768
	Total	650,138	650,382	650,559	-0.7%	652,683	321,579	331,543
MSA Counties	Benton	26,780	26,944	26,962	6.5%	25,874	12,681	12,768
	Black Hawk	125,701	125,960	126,106	-1.5%	126,827	60,961	66,101
	Bremer	23,492	23,590	23,837	2.2%	23,433	11,296	12,064
	Dallas	49,526	51,879	54,525	33.8%	44,513	20,513	21,069
	Dubuque	91,223	91,603	92,384	3.6%	90,048	43,537	45,934
	Grundy	12,368	12,307	12,320	-0.4%	12,328	6,023	6,309
	Guthrie	11,524	11,419	11,344	-0.1%	11,376	5,598	5,767
	Harrison	15,770	15,759	15,745	0.5%	15,648	7,663	7,945
	Johnson	116,401	117,194	118,038	6.3%	112,865	55,078	55,877
	Jones	20,527	20,495	20,505	1.4%	20,376	10,701	9,669
	Linn	197,555	199,553	201,853	5.3%	193,890	93,585	97,507
	Madison	14,904	15,148	15,547	10.9%	14,399	6,960	7,134
	Mills	14,973	15,255	15,595	7.2%	14,742	7,271	7,224
	Polk	394,211	401,755	408,888	9.2%	383,208	182,029	193,441
	Pottawattamie	89,261	89,673	90,218	2.9%	88,054	42,615	44,715
	Scott	160,105	161,170	162,621	2.5%	159,355	77,548	80,959
	Story	80,296	79,787	80,145	0.2%	79,635	40,655	38,586
	Warren	42,408	43,165	43,926	8.0%	41,455	19,854	20,902
	Washington	21,307	21,372	21,529	4.2%	20,986	10,060	10,763
	Woodbury	103,191	102,518	102,972	-0.9%	103,385	50,691	52,903
	Total	1,611,523	1,626,546	1,645,060	5.2%	1,582,398	765,319	797,637

¹Percent change from 2000 to 2006²1997-2006 Average³1996-2004 Average

Source: Population Division, U.S. Census Bureau and SEER*Stat

Average Annual Population Distribution by Age: 1996-2004

	County	% < 1	% 1-4	% 5-14	% 15-24	% 25-44	% 45-64	% 65-84	% 85 +
Counties with Average Population < 10,000	Adair	1.0%	4.2%	13.1%	11.7%	24.3%	23.5%	18.0%	4.2%
	Adams	0.9%	4.3%	13.2%	10.9%	24.4%	24.6%	18.2%	3.5%
	Audubon	1.0%	4.4%	14.5%	10.5%	22.6%	23.7%	19.3%	4.0%
	Clarke	1.3%	4.9%	14.3%	12.4%	26.4%	23.1%	14.4%	3.1%
	Davis	1.2%	5.6%	14.6%	12.7%	25.4%	23.1%	14.3%	3.1%
	Decatur	1.0%	4.3%	12.3%	21.1%	22.0%	21.3%	14.9%	3.1%
	Fremont	1.0%	4.4%	14.2%	11.0%	24.4%	24.9%	17.0%	3.1%
	Howard	1.2%	4.6%	14.7%	11.8%	25.3%	22.0%	16.8%	3.4%
	Ida	1.0%	4.4%	14.1%	11.6%	24.0%	23.2%	18.5%	3.3%
	Lucas	1.0%	4.7%	14.2%	12.1%	25.1%	23.6%	15.8%	3.5%
	Monona	1.0%	4.1%	13.0%	10.7%	23.5%	23.8%	19.4%	4.5%
	Monroe	1.2%	4.8%	14.1%	11.9%	25.3%	23.4%	16.2%	3.0%
	Osceola	1.1%	4.6%	14.6%	12.3%	25.7%	22.7%	15.9%	3.1%
	Palo Alto	1.0%	4.4%	13.1%	14.7%	23.0%	22.5%	17.6%	3.8%
	Pocahontas	1.0%	3.9%	14.3%	10.9%	22.8%	25.1%	18.4%	3.6%
	Ringgold	1.1%	4.6%	12.6%	12.1%	21.9%	24.0%	19.8%	4.0%
	Taylor	1.0%	4.4%	13.4%	12.1%	23.4%	23.4%	18.4%	3.9%
	Van Buren	1.0%	4.5%	13.9%	11.9%	24.5%	24.9%	16.1%	3.3%
	Wayne	1.0%	4.1%	13.3%	11.3%	23.0%	23.6%	19.5%	4.2%
	Worth	1.1%	4.3%	13.4%	11.3%	26.1%	24.3%	15.8%	3.6%
	Total	1.1%	4.5%	13.8%	12.3%	24.2%	23.5%	17.1%	3.6%
Counties with Average Population 10,000 – 20,000	Allamakee	1.1%	4.6%	14.2%	11.9%	25.8%	23.9%	15.5%	3.0%
	Appanoose	1.2%	4.3%	13.2%	12.5%	25.2%	23.7%	16.5%	3.4%
	Butler	1.0%	4.3%	13.6%	11.5%	24.9%	24.7%	16.9%	3.2%
	Calhoun	0.9%	4.0%	12.6%	11.3%	24.8%	24.2%	18.2%	4.0%
	Cass	1.1%	4.3%	13.2%	11.5%	24.8%	24.2%	17.3%	3.6%
	Cedar	1.1%	4.7%	14.0%	12.1%	27.6%	24.3%	13.4%	2.9%
	Cherokee	1.0%	4.3%	13.6%	12.0%	23.9%	24.8%	17.4%	3.0%
	Chickasaw	1.1%	4.6%	14.6%	12.4%	25.5%	23.9%	15.1%	2.8%
	Clay	1.2%	4.7%	13.7%	12.4%	27.0%	23.1%	15.1%	2.9%
	Clayton	1.1%	4.5%	14.2%	11.7%	25.8%	24.2%	15.5%	2.9%
	Crawford	1.2%	5.0%	14.2%	13.6%	25.6%	23.2%	14.6%	2.7%
	Delaware	1.2%	5.0%	16.1%	13.1%	27.2%	22.2%	13.0%	2.2%
	Dickinson	1.0%	4.2%	12.0%	10.9%	24.3%	26.8%	17.8%	3.0%
	Emmet	1.2%	4.2%	12.9%	15.5%	24.0%	23.0%	15.9%	3.4%
	Floyd	1.1%	4.8%	13.9%	11.8%	24.6%	24.4%	16.1%	3.3%
	Franklin	1.1%	4.4%	13.3%	12.1%	24.4%	24.5%	17.1%	3.0%
	Greene	1.1%	4.5%	14.1%	11.6%	24.0%	23.1%	17.8%	4.0%
	Hamilton	1.2%	4.9%	13.9%	11.7%	27.1%	23.0%	15.3%	2.8%
	Hancock	1.1%	4.7%	14.6%	12.1%	25.2%	24.1%	15.2%	3.0%
	Hardin	1.1%	4.5%	12.8%	14.1%	23.6%	23.1%	17.1%	3.7%
	Humboldt	1.1%	4.2%	13.5%	12.3%	24.4%	23.6%	17.6%	3.3%
	Iowa	1.1%	4.8%	15.1%	11.2%	27.7%	22.9%	14.2%	3.1%
	Jefferson	1.0%	4.2%	13.3%	13.0%	25.1%	29.6%	11.5%	2.3%
	Keokuk	1.1%	4.7%	14.4%	12.0%	25.5%	22.5%	16.3%	3.5%
	Kossuth	1.0%	4.3%	14.2%	11.8%	24.0%	24.5%	17.0%	3.2%
	Louisa	1.3%	5.5%	15.3%	12.6%	28.7%	22.3%	12.1%	2.2%
	Lyon	1.4%	5.2%	15.7%	12.7%	25.0%	21.6%	15.4%	3.0%
	Mitchell	1.2%	4.8%	14.9%	11.3%	23.9%	22.5%	17.5%	4.0%
	Montgomery	1.1%	4.7%	13.9%	10.9%	25.4%	23.6%	16.7%	3.7%
	O'Brien	1.1%	4.6%	13.6%	12.6%	24.1%	22.8%	17.5%	3.8%

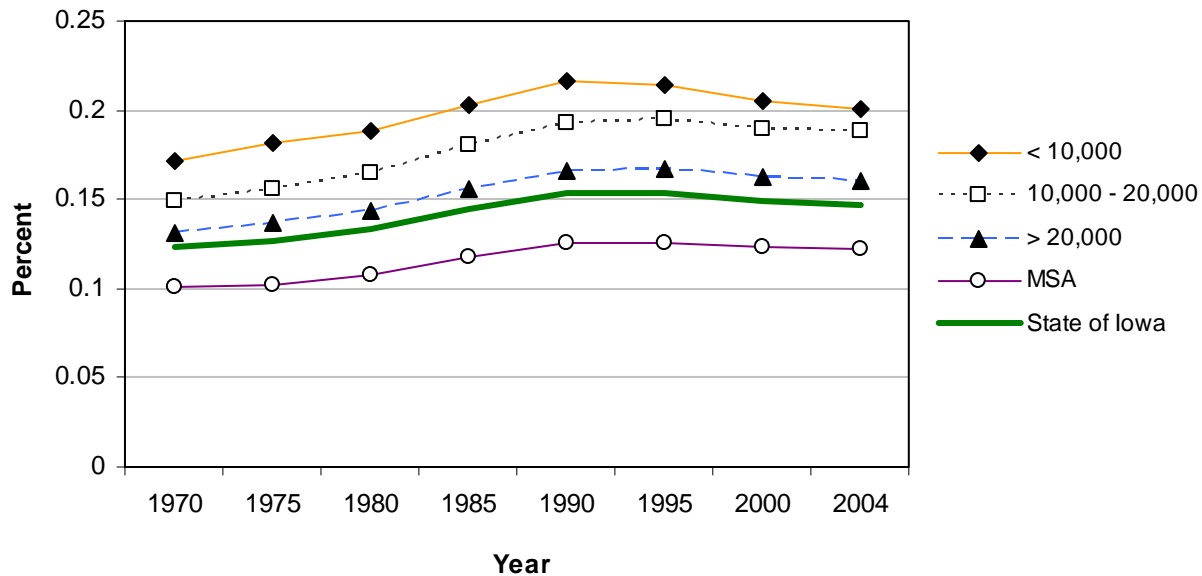
Average Annual Population Distribution by Age: 1996-2004 (cont.)

County		% < 1	% 1-4	% 5-14	% 15-24	% 25-44	% 45-64	% 65-84	% 85 +
Counties with Average Population 10,000 – 20,000	Page	1.0%	4.3%	12.4%	12.8%	26.4%	23.1%	16.7%	3.2%
	Poweshiek	1.0%	4.3%	12.5%	17.3%	24.5%	22.7%	14.7%	3.0%
	Sac	1.1%	4.3%	13.6%	11.5%	23.4%	23.5%	18.6%	4.0%
	Shelby	1.0%	4.5%	14.6%	11.3%	24.8%	23.1%	17.3%	3.3%
	Tama	1.3%	5.2%	14.3%	12.3%	25.0%	23.1%	15.5%	3.2%
	Union	1.1%	4.5%	12.9%	12.8%	25.6%	24.2%	15.9%	3.0%
	Winnebago	1.0%	4.4%	13.3%	14.5%	24.0%	23.8%	15.6%	3.5%
	Wright	1.1%	4.5%	13.5%	11.3%	24.4%	23.9%	17.4%	3.9%
	Total	1.1%	4.6%	13.8%	12.4%	25.3%	23.8%	15.9%	3.2%
Counties with Average Population > 20,000	Boone	1.2%	4.7%	13.6%	13.1%	27.5%	23.6%	13.6%	2.7%
	Buchanan	1.4%	5.5%	15.7%	13.5%	26.4%	22.8%	12.5%	2.1%
	Buena Vista	1.1%	4.6%	14.2%	17.0%	24.9%	21.2%	14.2%	2.8%
	Carroll	1.2%	4.8%	14.9%	12.9%	25.7%	21.8%	15.7%	3.1%
	Cerro Gordo	1.1%	4.7%	13.1%	13.1%	26.7%	23.6%	15.0%	2.6%
	Clinton	1.2%	5.0%	14.1%	12.9%	27.1%	23.7%	13.7%	2.2%
	Des Moines	1.2%	4.9%	13.5%	12.8%	26.4%	24.7%	14.0%	2.5%
	Fayette	1.1%	4.5%	13.8%	13.5%	25.0%	23.1%	16.0%	3.0%
	Henry	1.1%	4.7%	13.6%	13.7%	29.4%	22.8%	12.3%	2.5%
	Jackson	1.1%	4.7%	14.6%	12.3%	26.4%	23.8%	14.6%	2.6%
	Jasper	1.2%	4.8%	13.7%	11.9%	28.6%	23.7%	13.9%	2.2%
	Lee	1.1%	4.7%	13.5%	12.2%	26.8%	25.1%	14.1%	2.5%
	Mahaska	1.3%	5.2%	14.0%	14.2%	27.0%	22.1%	13.8%	2.5%
	Marion	1.2%	4.9%	14.0%	15.1%	26.5%	22.4%	13.3%	2.7%
	Marshall	1.3%	5.0%	13.7%	12.7%	26.3%	24.4%	14.2%	2.3%
	Muscatine	1.4%	5.5%	14.8%	13.3%	28.9%	23.2%	11.1%	1.9%
	Plymouth	1.2%	5.2%	15.5%	13.3%	26.0%	22.8%	13.5%	2.4%
	Sioux	1.3%	5.3%	14.8%	20.3%	23.6%	19.6%	12.7%	2.3%
	Wapello	1.2%	4.7%	13.0%	13.7%	26.2%	23.5%	14.9%	2.7%
	Webster	1.2%	5.0%	13.5%	15.2%	25.5%	22.2%	14.6%	2.7%
	Winneshiek	0.9%	4.0%	12.6%	21.8%	24.0%	21.0%	13.1%	2.5%
	Total	1.2%	4.9%	13.9%	14.0%	26.5%	23.1%	13.9%	2.5%
MSA Counties	Benton	1.2%	5.1%	15.4%	12.4%	29.1%	21.7%	12.7%	2.4%
	Blackhawk	1.2%	4.8%	12.6%	19.7%	25.5%	22.2%	12.0%	2.1%
	Bremer	1.1%	4.3%	13.3%	17.3%	23.9%	24.1%	13.4%	2.7%
	Dallas	1.4%	6.0%	15.0%	12.7%	32.3%	21.6%	9.4%	1.7%
	Dubuque	1.3%	5.2%	14.1%	14.8%	27.2%	22.7%	12.6%	2.2%
	Grundy	0.9%	4.3%	14.1%	11.8%	25.0%	24.6%	15.9%	3.2%
	Guthrie	1.1%	4.3%	13.0%	11.2%	25.0%	25.1%	17.2%	3.1%
	Harrison	1.1%	4.7%	14.7%	11.9%	26.9%	23.0%	14.8%	2.9%
	Johnson	1.2%	4.5%	10.6%	26.7%	31.3%	18.0%	6.5%	1.1%
	Jones	1.1%	4.3%	13.4%	12.9%	29.2%	23.4%	13.4%	2.3%
	Linn	1.4%	5.5%	13.9%	14.0%	30.4%	22.4%	10.6%	1.7%
	Madison	1.3%	5.4%	14.8%	12.3%	27.6%	23.7%	12.2%	2.7%
	Mills	1.1%	4.9%	15.0%	12.4%	28.4%	25.6%	10.9%	1.8%
	Polk	1.5%	5.9%	13.9%	13.4%	32.2%	21.9%	9.6%	1.5%
	Pottawattamie	1.4%	5.2%	14.3%	13.7%	28.6%	23.1%	12.1%	1.6%
	Scott	1.4%	5.5%	14.6%	13.9%	29.4%	23.3%	10.3%	1.5%
	Story	1.1%	4.0%	9.9%	32.1%	25.9%	17.0%	8.4%	1.6%
	Warren	1.2%	5.2%	14.9%	15.1%	28.2%	23.5%	10.2%	1.7%
	Washington	1.4%	5.3%	14.3%	11.9%	26.9%	22.5%	14.6%	3.2%
	Woodbury	1.5%	6.0%	15.1%	14.5%	28.3%	21.2%	11.4%	1.9%
	Total	1.4%	5.3%	13.6%	16.1%	29.4%	21.9%	10.6%	1.8%

Source: Population Division, U.S. Census Bureau and SEER*Stat

Aging Trend in Iowa

Percent of Iowans Age 65 and Older



Estimated Year 2000 U.S. Standard Population

Age Range	Population	Percent of Total
< 1	13,818	1.4%
01-04	55,317	5.5%
05-09	72,533	7.3%
10-14	73,032	7.3%
15-19	72,169	7.2%
20-24	66,478	6.6%
25-29	64,529	6.5%
30-34	71,044	7.1%
35-39	80,762	8.1%
40-44	81,851	8.2%
45-49	72,118	7.2%
50-54	62,716	6.3%
55-59	48,454	4.8%
60-64	38,793	3.9%
65-69	34,264	3.4%
70-74	31,773	3.2%
75-79	26,999	2.7%
80-84	17,842	1.8%
85+	15,508	1.6%
Total	1,000,000	100.0%

Source: Population Division, U.S. Census Bureau, and SEER*Stat

Health and Social Behaviors

The health of individuals and their communities is determined by a variety of factors including biologic, environmental, social, and behavioral influences. This section provides an overview of selected surveys and statistics collected in Iowa to track the effects of these various influences on the health of Iowans. Introductions are provided individually for each of the surveys with links to more detailed information on survey methodology and additional data where available. Information on marriages and dissolutions is included at the end of this section because it characterizes and contrasts the population dynamics that can affect health.

QUESTIONS TO CONSIDER WHEN USING SURVEY RESULTS...

- ✓ What was the method used to conduct the survey, i.e., telephone, mail, personal interview?
- ✓ What was the response rate of those surveyed and what factors might influence who responds and who doesn't?
- ✓ Are the survey respondents representative of and thus generalizable to a particular population?
- ✓ Because a survey provides only estimates based on the sampled population, what are the variability measures of these estimates?
- ✓ Were the survey questions cross-sectional in that they represent attitudes, behaviors, or disease status of different people, or were the same people surveyed repeatedly over time?

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) survey is an ongoing telephone survey that is conducted each year in every state, including Iowa, as well as in the District of Columbia, and in Puerto Rico. It is financially and technically supported by the Centers for Disease Control and Prevention (CDC) and is a scientifically-designed and validated method of collecting information.

The Iowa BRFSS collects health risk behavior information from over 5,000 household telephone surveys in both English and Spanish, and is designed to collect information on nationally agreed upon topics and on additional areas of special interest to Iowa. Because the BRFSS is conducted annually, the prevalence of these behaviors may be followed longitudinally. The risk behaviors of those surveyed (Iowa residents age 18 and over) are major contributions to illness, disability, and premature death.

The goal of the Iowa BRFSS is to provide data to initiate and guide health promotion disease prevention programs. The BRFSS program achieves this goal by:

1. determining state specific prevalence of personal health behaviors related to the leading cause of premature death;
2. developing the capacity of the state health department to conduct credible telephone surveys; and
3. advancing the understanding that health-related behaviors are critical indices of health.

The BRFSS results can help inform health professionals as to health behaviors and beliefs of the general population, and can be used as a measure of the effectiveness of various public health strategies.

BRFSS KEY AREAS...

- ✓ Health Status
- ✓ Health Care Coverage
- ✓ Physical Inactivity
- ✓ Body Weight
- ✓ Smoking
- ✓ Alcohol Consumption
- ✓ Hypertension
- ✓ Cholesterol Awareness
- ✓ Colorectal Cancer Screening
- ✓ Diabetes
- ✓ Adult Immunizations
- ✓ Injury Control
- ✓ Women's Health
- ✓ HIV/AIDS

Iowa Behavioral Risk Factor Surveillance System 2004-2005

	Definition	Iowa		U.S. Median ¹	
		2004 % (%,%) ²	2005 % (%,%) ²	2004 %	2005 %
Binge drinking	All respondents having five or more alcoholic beverages on one or more occasion in the past month.	19.0 (17.6, 20.4)	18.6 (17.1, 20.1)	14.9	14.4
Chronic drinking	All respondents having an average of greater than two drinks per day for men, and one drink per day for women.	5.6 (4.8, 6.4)	5.6 (4.7, 6.5)	4.9	4.9
Current smoker	All respondents smoking 100 cigarettes in their lifetime and currently smoking every day or some days.	20.8 (19.4, 22.2)	20.4 (19.0, 21.8)	20.8	20.5
Diabetes	All respondents ever being diagnosed with diabetes, excluding gestational diabetes.	6.4 (5.7, 7.1)	6.8 (6.1, 7.5)	7.1	7.3
High blood pressure	All respondents being told by a health professional that they had high blood pressure.	26.1 (24.8, 27.5)	24.5 (23.2, 25.8)	**	25.5
Cholesterol	All respondents having their cholesterol checked in the past five years.	**	72.2 (70.5, 73.9)	**	73.0
High cholesterol	All respondents being told by a health professional that they had high cholesterol.	**	35.6 (33.9, 37.3)	**	35.6
No insurance coverage	All respondents who currently did not have any kind of health care coverage.	10.6 (9.4, 11.8)	10.7 (9.5, 11.9)	14.9	14.5
Mammogram	Female respondents age 40 and older having a mammogram in the past two years.	75.2 (73.2, 77.2)	75.5 (73.5, 77.5)	74.7	**
Pap test	Female respondents with a uterine cervix having a pap test in the past three years.	86.0 (84.3, 87.7)	84.6 (82.6, 86.7)	85.9	**
Obesity	All respondents who had a calculated body mass index (BMI) of 30.0 or above.	23.5 (22.1, 24.9)	25.4 (23.9, 26.9)	23.2	24.4
Overweight	All respondents who had a calculated body mass index (BMI) from 25.0 to 29.9, inclusive.	37.4 (35.8, 39.0)	37.1 (35.5, 38.7)	36.9	36.7
Sigmoidoscopy/ Colonoscopy	Respondents age 50 and over who ever had a sigmoidoscopy or colonoscopy.	51.6 (49.4, 53.8)	55.9 (53.8, 58.0)	53.0	**
Tested for HIV	Respondents age 18 to 64 who have ever had a HIV test, excluding for blood donations.	29.0 (27.3, 30.8)	28.5 (26.7, 30.2)	41.9	38.4
Asthma	All respondents who currently have asthma.	6.6 (5.8, 7.4)	7.2 (6.3, 8.1)	8.3	8.0
Health status	All respondents who rate their current health as good, very good, or excellent.	87.6 (86.6, 88.6)	87.8 (86.7, 88.9)	84.9	85.1

**This question was not asked in all states in the given year

¹In the U.S. half of the 50 states fall above this point, and half fall below

²95% confidence interval

Source: BRFSS, Centers for Disease Control and Prevention and the Iowa Department of Public Health

2006 Iowa Adult Tobacco Survey (ATS)

The 2006 Iowa Adult Tobacco Survey (ATS) is the fourth in a series of surveys (2001, 2002, and 2004) designed to measure tobacco-related behaviors and attitudes among Iowa adults. The results of the survey are used to evaluate the effectiveness of current Division of Tobacco Use Prevention and Control programs and activities to reduce tobacco use among adult Iowans. The Division contracted with the Center for Social and Behavioral Research at the University of Northern Iowa to conduct this telephone survey of a random sample of 1,950 adult Iowans. The ATS was developed by the U.S. Centers for Disease Control and Prevention and is conducted biannually in all 50 states.

SELECTED RESULTS...

Prevalence

- The percentage of adult Iowans who are current smokers is now 18%. (Smoking prevalence was 23% in 2002.)
- For young adults ages 18 -24, the percentage of smokers is 34%, almost twice the rate of older adults.
- Iowans who live in a household at or below the federal poverty level are 2½ times more likely to smoke than adults with higher incomes (44% vs. 17% respectively).

Cessation

- More than 72% of current smokers report that they would like to quit.
- About 43% of smokers made a serious quit attempt (stopped smoking for one day or more) during the past year.
- Among those smokers who tried to quit during the past 12 months, 33% used the nicotine patch, nicotine gum, or some other medication to help them quit.

Secondhand Smoke

- Among current smokers, 48% had one or more children living in their household.
- Among adults, 95% believe that breathing someone else's smoke is harmful to health.
- The vast majority of adult Iowans, 90%, agree that people should be protected from exposure to secondhand smoke.

For more information, see www.idph.state.ia.us/tobacco/common/pdf/ATS_2006_Final_Draft.pdf.

Substance Abuse Treatment

Substance abuse treatment is provided to all 99 counties in Iowa using funding from the Alcohol and Drug Abuse and Mental Health Services block grant, state substance abuse appropriations, and Medicaid. Iowa operates under a managed care system which is currently administered by Magellan Behavioral Care of Iowa (MBCI). MBCI contracts with a total of 64 service providers in 22 service areas as represented on the map on the next page. The 64 service providers include 32 who receive funding from both IDPH and Medicaid, and 32 who are funded through Medicaid only. Services are available to all Iowans regardless of their ability to pay or financial status through a sliding-fee schedule.

The reporting period was for calendar years 1998-2006. The numbers reflect those identifying a county of residence in Iowa. Those identifying their residence outside of Iowa were not counted. The count is unduplicated with the following exceptions: a client was counted twice if the primary substance of abuse changed between admissions or if the client's age changed between admissions.

STATE OF IOWA ADMISSIONS TOTALS FOR SUBSTANCE ABUSE TREATMENT...

	<u>Alcohol</u>	<u>Marijuana</u>	<u>Other</u>
1998	12,994	5,159	5,175
1999	14,102	5,433	5,129
2000	14,192	6,149	5,690
2001	12,724	4,914	5,077
2002	11,538	5,180	6,227
2003	12,440	6,355	7,582
2004	12,859	6,501	8,062
2005	13,124	6,653	8,114
2006	13,521	6,938	8,257

For more information, see www.drugfreeinfo.org or call the Helpline at 1-866-242-4111.

Marriages 2004-2005

	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	81	5.2 (95)	Monona	113	5.9 (81)
	Adams	72	8.4 (05)	Monroe	105	6.7 (49)
	Audubon	75	5.8 (82)	Osceola	76	5.7 (90)
	Clarke	129	7.0 (31)	Palo Alto	119	6.1 (68)
	Davis	112	6.5 (61)	Pocahontas	81	5.1 (96)
	Decatur	131	7.6 (18)	Ringgold	63	6.0 (76)
	Fremont	103	6.7 (52)	Taylor	98	7.4 (24)
	Howard	128	6.6 (54)	Van Buren	115	7.4 (23)
	Ida	99	6.7 (50)	Wayne	86	6.5 (58)
	Lucas	151	7.8 (12)	Worth	90	5.8 (84)
				Total	2,027	6.5
Counties with Average Population 10,000 – 20,000	Allamakee	199	6.8 (48)	Hardin	257	7.1 (29)
	Appanoose	224	8.2 (07)	Humboldt	114	5.7 (89)
	Butler	171	5.7 (88)	Iowa	219	6.8 (40)
	Calhoun	121	5.8 (85)	Jefferson	190	5.9 (78)
	Cass	199	7.0 (32)	Keokuk	148	6.6 (53)
	Cedar	200	5.5 (93)	Kossuth	244	7.5 (22)
	Cherokee	165	6.7 (51)	Louisa	113	4.7 (98)
	Chickasaw	759	30.3 (01)	Lyon	144	6.1 (67)
	Clay	229	6.8 (45)	Mitchell	129	5.9 (80)
	Clayton	289	7.9 (10)	Montgomery	154	6.8 (43)
	Crawford	208	6.2 (66)	O'Brien	186	6.4 (62)
	Delaware	252	7.0 (33)	Page	205	6.3 (65)
	Dickinson	366	11.0 (02)	Poweshiek	264	7.0 (35)
	Emmet	136	6.4 (63)	Sac	140	6.5 (59)
	Floyd	197	6.0 (75)	Shelby	154	6.1 (70)
	Franklin	141	6.6 (55)	Tama	243	6.8 (46)
	Greene	119	5.9 (77)	Union	229	9.6 (03)
	Hamilton	208	6.4 (64)	Winnebago	149	6.6 (57)
	Hancock	142	6.0 (72)	Wright	129	4.7 (99)
				Total	7,736	7.2
Counties with Average Population > 20,000	Boone	347	6.6 (56)	Lee	583	8.0 (08)
	Buchanan	257	6.1 (69)	Mahaska	329	7.4 (25)
	Buena Vista	283	7.0 (30)	Marion	517	7.9 (09)
	Carroll	372	8.9 (04)	Marshall	610	7.7 (16)
	Cerro Gordo	696	7.8 (14)	Muscatine	638	7.5 (21)
	Clinton	715	7.2 (28)	Plymouth	295	5.9 (79)
	Des Moines	566	6.9 (37)	Sioux	464	7.2 (27)
	Fayette	255	6.0 (73)	Wapello	564	7.9 (11)
	Henry	276	6.8 (42)	Webster	534	6.8 (41)
	Jackson	278	6.9 (39)	Winneshiek	324	7.6 (17)
	Jasper	450	6.0 (74)	Total	9,353	7.2
MSA Counties	Benton	295	5.5 (92)	Linn	2,579	6.5 (60)
	Black Hawk	1,702	6.8 (47)	Madison	234	7.8 (13)
	Bremer	345	7.3 (26)	Mills	150	5.0 (97)
	Dallas	843	8.3 (06)	Polk	5,399	6.8 (44)
	Dubuque	1,413	7.7 (15)	Pottawattamie	1,346	7.5 (20)
	Grundy	128	5.2 (94)	Scott	2,219	6.9 (36)
	Guthrie	173	7.5 (19)	Story	1,101	6.9 (38)
	Harrison	180	5.7 (87)	Warren	596	7.0 (34)
	Johnson	1,334	5.7 (86)	Washington	249	5.8 (83)
	Jones	228	5.6 (91)	Woodbury	1,244	6.0 (71)
				Total	21,758	6.7
State Total		40,874	6.9			

¹Rates per 1,000 population²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics

Dissolutions 2004-2005

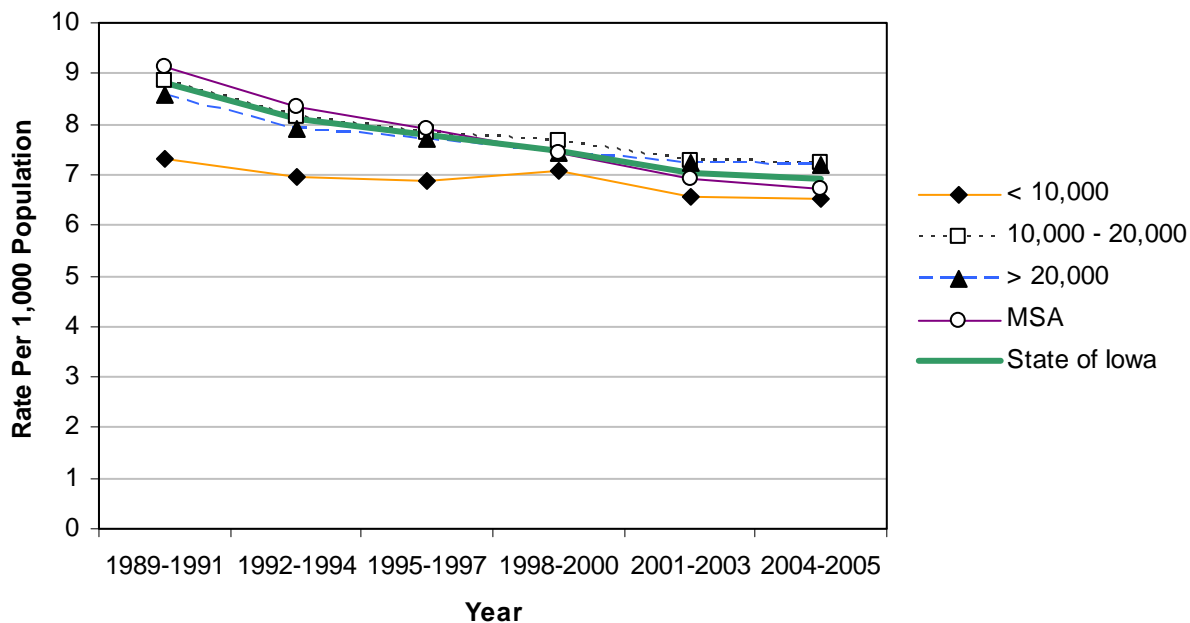
	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	55	3.5 (19)	Monona	54	2.8 (50)
	Adams	31	3.6 (14)	Monroe	50	3.2 (27)
	Audubon	34	2.7 (58)	Osceola	26	1.9 (86)
	Clarke	59	3.2 (26)	Palo Alto	43	2.2 (77)
	Davis	46	2.7 (57)	Pocahontas	42	2.6 (61)
	Decatur	32	1.9 (87)	Ringgold	21	2.0 (85)
	Fremont	59	3.8 (08)	Taylor	44	3.3 (23)
	Howard	51	2.6 (62)	Van Buren	61	3.9 (07)
	Ida	44	3.0 (41)	Wayne	48	3.7 (13)
	Lucas	55	2.9 (47)	Worth	27	1.7 (90)
				Total	882	2.8
Counties with Average Population 10,000 – 20,000	Allamakee	62	2.1 (83)	Hardin	121	3.4 (21)
	Appanoose	0	0.0 (99)	Humboldt	62	3.1 (35)
	Butler	70	2.3 (74)	Iowa	77	2.4 (72)
	Calhoun	53	2.5 (69)	Jefferson	151	4.7 (02)
	Cass	100	3.5 (18)	Keokuk	38	1.7 (91)
	Cedar	94	2.6 (64)	Kossuth	82	2.5 (68)
	Cherokee	25	1.0 (97)	Louisa	79	3.3 (24)
	Chickasaw	50	2.0 (84)	Lyon	35	1.5 (95)
	Clay	82	2.4 (71)	Mitchell	57	2.6 (63)
	Clayton	84	2.3 (76)	Montgomery	81	3.6 (16)
	Crawford	102	3.0 (39)	O'Brien	62	2.1 (80)
	Delaware	106	2.9 (43)	Page	103	3.2 (30)
	Dickinson	122	3.7 (12)	Poweshiek	136	3.6 (15)
	Emmet	64	3.0 (37)	Sac	64	3.0 (40)
	Floyd	82	2.5 (70)	Shelby	90	3.6 (17)
	Franklin	68	3.2 (31)	Tama	102	2.8 (48)
	Greene	82	4.1 (04)	Union	95	4.0 (06)
	Hamilton	119	3.7 (11)	Winnebago	62	2.7 (53)
	Hancock	22	0.9 (98)	Wright	74	2.7 (54)
				Total	2,958	2.8
Counties with Average Population > 20,000	Boone	197	3.7 (09)	Lee	209	2.9 (46)
	Buchanan	100	2.4 (73)	Mahaska	138	3.1 (33)
	Buena Vista	106	2.6 (60)	Marion	198	3.0 (36)
	Carroll	107	2.5 (67)	Marshall	294	3.7 (10)
	Cerro Gordo	286	3.2 (28)	Muscatine	427	5.0 (01)
	Clinton	254	2.6 (66)	Plymouth	105	2.1 (81)
	Des Moines	190	2.3 (75)	Sioux	108	1.7 (93)
	Fayette	112	2.6 (59)	Wapello	209	2.9 (44)
	Henry	139	3.4 (20)	Webster	212	2.7 (55)
	Jackson	127	3.1 (32)	Winneshiek	93	2.2 (78)
	Jasper	103	1.4 (96)	Total	3,714	2.9
MSA Counties	Benton	117	2.2 (79)	Linn	1,124	2.8 (49)
	Black Hawk	453	1.8 (89)	Madison	123	4.1 (05)
	Bremer	79	1.7 (92)	Mills	101	3.3 (22)
	Dallas	260	2.6 (65)	Polk	2,462	3.1 (34)
	Dubuque	495	2.7 (56)	Pottawattamie	767	4.3 (03)
	Grundy	52	2.1 (82)	Scott	926	2.9 (45)
	Guthrie	73	3.2 (29)	Story	289	1.8 (88)
	Harrison	102	3.2 (25)	Warren	241	2.8 (51)
	Johnson	381	1.6 (94)	Washington	129	3.0 (38)
	Jones	114	2.8 (52)	Woodbury	611	3.0 (42)
				Total	8,899	2.7
State Total		16,453	2.8			

¹Rates per 1,000 population²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics

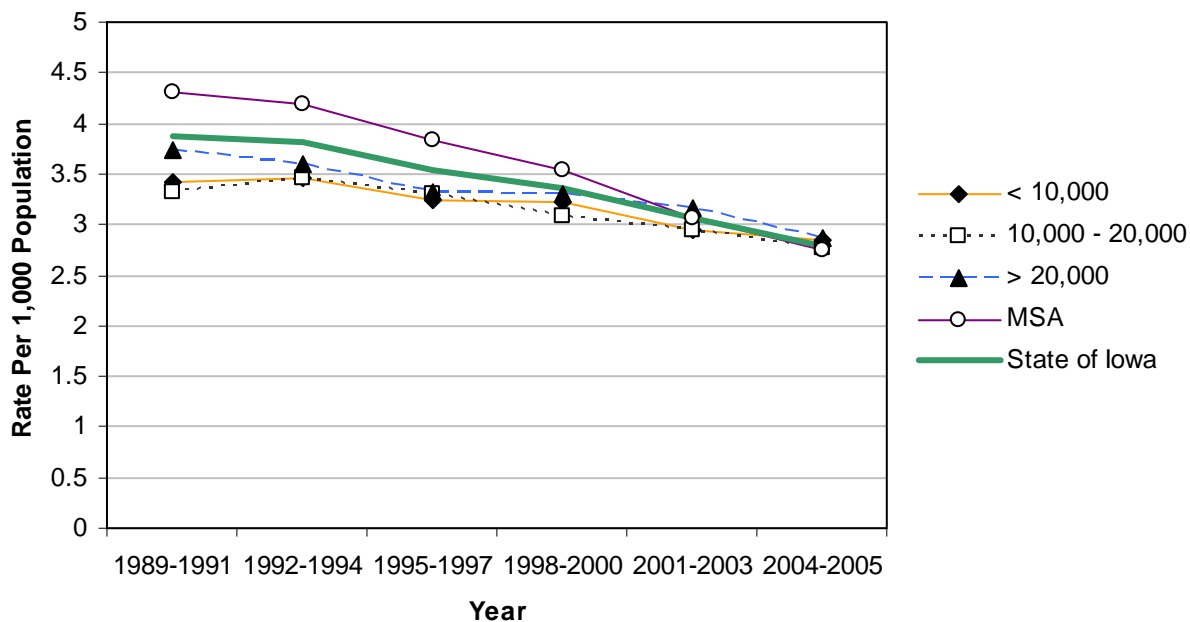
Marriages 1989-2005

Crude Rates



Dissolutions 1989-2005

Crude Rates



Prenatal and Infant Health

Each year families across the United States bring home a healthy baby who has all the potential for a full and productive life. However, some families will suffer the loss of their child soon after birth.

Infant morbidity and mortality are critical indicators of the health of a population. Low birth weight and preterm birth result in a significant loss of life; surviving infants often sustain residual injuries that affect quality of life, and there is substantial financial cost to individuals and to society in caring for these children.

Certain factors have proven to increase the likelihood of delivering a low birth weight or preterm infant, such as (1) multiple births; (2) cigarette smoking during pregnancy; (3) substance abuse immediately prior to conception and during pregnancy (including alcohol abuse); (4) maternal age extremes; and (5) short inter-pregnancy interval.

Birth defects rank as the leading cause of mortality in full-term newborn babies in the United States. Iowa's overall birth defect rate is approximately 4.6% of all births. The state of Iowa has taken a leadership role in birth defect surveillance and serves as a model to other states. Iowa has also partnered with the March of Dimes' Folic Acid education campaign and the Preterm Birth Prevention campaign. Adequate folic acid intake by women of reproductive years has been demonstrated to decrease the risk of neural tube defects in children. Early prenatal care for mothers and health education to women and medical providers allow for a healthier pregnancy and improved birth outcomes.

Interventions need to focus on providing preconceptional health care to women, early and comprehensive prenatal care, and family support that includes promotion of healthy lifestyles.

IN AN AVERAGE WEEK IN IOWA¹

- ✓ 739 babies are born.
- ✓ 62 babies are born to teen mothers.
- ✓ 50 babies are born to mothers who receive inadequate prenatal care.
- ✓ 52 babies are born with low birth weight.
- ✓ 87 babies are born preterm.
- ✓ 4 babies die before their first birthday.

¹Source: March of Dimes perinatal statistics: www.marchofdimes.com/peristats

Live Births 2004-2005

	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	146	9.3 (96)	Monona	198	10.3 (79)
	Adams	80	9.4 (94)	Monroe	158	10.1 (84)
	Audubon	119	9.3 (97)	Osceola	153	11.4 (60)
	Clarke	256	13.9 (10)	Palo Alto	226	11.6 (56)
	Davis	255	14.8 (04)	Pocahontas	162	10.1 (83)
	Decatur	204	11.8 (53)	Ringgold	136	12.8 (26)
	Fremont	164	10.6 (78)	Taylor	147	11.1 (66)
	Howard	250	12.8 (27)	Van Buren	186	12.0 (48)
	Ida	161	10.9 (70)	Wayne	157	11.9 (49)
	Lucas	209	10.8 (74)	Worth	155	10.0 (86)
				Total	3,522	11.3
Counties with Average Population 10,000 – 20,000	Allamakee	411	13.9 (11)	Hardin	407	11.3 (63)
	Appanoose	329	12.1 (47)	Humboldt	264	13.1 (21)
	Butler	350	11.6 (55)	Iowa	390	12.2 (44)
	Calhoun	215	10.2 (81)	Jefferson	323	10.1 (85)
	Cass	321	11.3 (62)	Keokuk	258	11.5 (58)
	Cedar	399	10.9 (69)	Kossuth	356	11.0 (68)
	Cherokee	226	9.2 (98)	Louisa	293	12.3 (41)
	Chickasaw	310	12.4 (36)	Lyon	313	13.4 (20)
	Clay	409	12.1 (46)	Mitchell	258	11.8 (52)
	Clayton	397	10.9 (73)	Montgomery	267	11.8 (54)
	Crawford	456	13.5 (18)	O'Brien	355	12.3 (42)
	Delaware	399	11.1 (67)	Page	335	10.3 (80)
	Dickinson	331	9.9 (88)	Poweshiek	378	10.0 (87)
	Emmet	287	13.6 (17)	Sac	243	11.3 (61)
	Floyd	415	12.6 (31)	Shelby	216	8.5 (99)
	Franklin	261	12.1 (45)	Tama	493	13.7 (14)
	Greene	193	9.6 (92)	Union	295	12.3 (40)
	Hamilton	386	11.9 (51)	Winnebago	221	9.7 (90)
	Hancock	272	11.5 (57)	Wright	351	12.9 (25)
				Total	12,383	11.6
Counties with Average Population > 20,000	Boone	597	11.3 (64)	Lee	792	10.8 (76)
	Buchanan	588	14.0 (08)	Mahaska	574	12.9 (23)
	Buena Vista	560	13.9 (12)	Marion	822	12.6 (33)
	Carroll	529	12.6 (32)	Marshall	1,254	15.8 (02)
	Cerro Gordo	971	10.9 (72)	Muscatine	1,174	13.8 (13)
	Clinton	1,222	12.3 (43)	Plymouth	637	12.8 (29)
	Des Moines	1,025	12.5 (35)	Sioux	943	14.6 (05)
	Fayette	459	10.8 (75)	Wapello	980	13.7 (16)
	Henry	501	12.3 (39)	Webster	965	12.3 (37)
	Jackson	391	9.7 (91)	Winneshiek	396	9.3 (95)
	Jasper	895	11.9 (50)	Total	16,275	12.5
MSA Counties	Benton	606	11.3 (65)	Linn	5,542	14.0 (09)
	Black Hawk	3,398	13.5 (19)	Madison	385	12.8 (28)
	Bremer	505	10.7 (77)	Mills	380	12.6 (34)
	Dallas	1,452	14.3 (07)	Polk	12,887	16.2 (01)
	Dubuque	2,329	12.7 (30)	Pottawattamie	2,448	13.7 (15)
	Grundy	235	9.5 (93)	Scott	4,616	14.4 (06)
	Guthrie	233	10.2 (82)	Story	1,847	11.5 (59)
	Harrison	313	9.9 (89)	Warren	1,056	12.3 (38)
	Johnson	3,017	12.9 (24)	Washington	555	13.0 (22)
	Jones	447	10.9 (71)	Woodbury	3,212	15.6 (03)
				Total	45,463	14
	State Total	77,643	13.1			

¹Rates per 1,000 population

²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Out-of-Wedlock Births 2004-2005

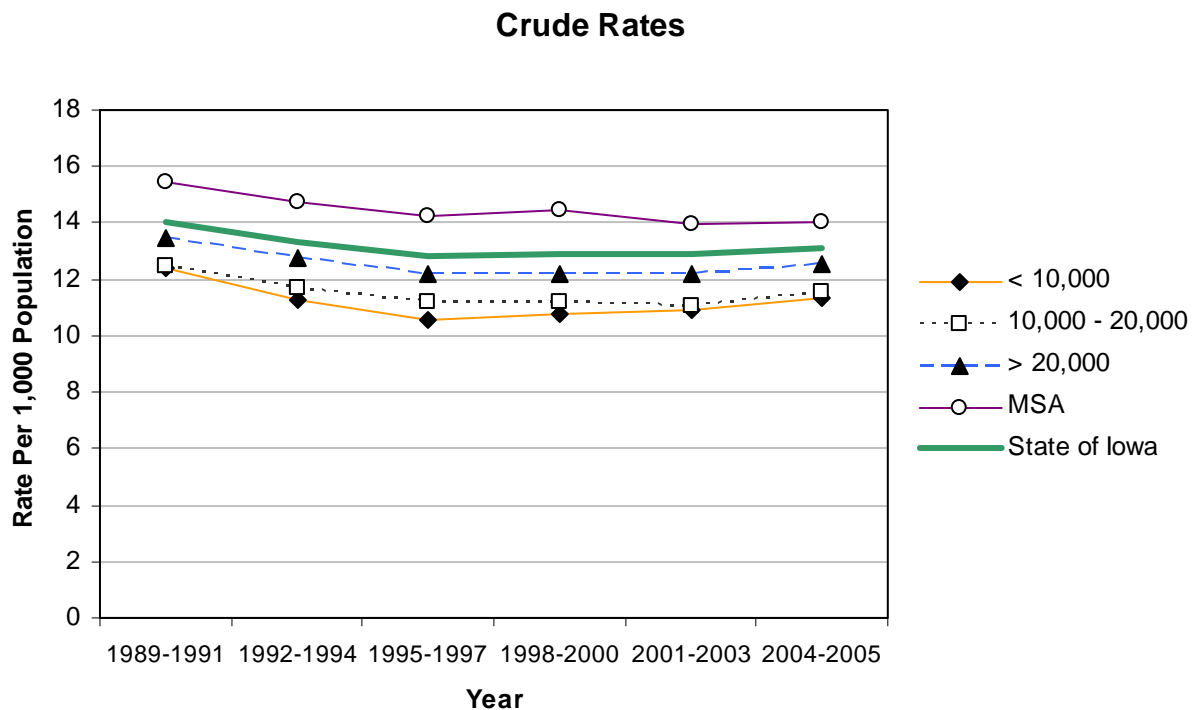
	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	40	274.0 (60)	Monona	80	404.0 (08)
	Adams	28	350.0 (28)	Monroe	38	240.5 (78)
	Audubon	43	361.3 (20)	Osceola	35	228.8 (81)
	Clarke	92	359.4 (23)	Palo Alto	56	247.8 (75)
	Davis	40	156.9 (98)	Pocahontas	47	290.1 (52)
	Decatur	51	250.0 (72)	Ringgold	36	264.7 (64)
	Fremont	56	341.5 (31)	Taylor	38	258.5 (66)
	Howard	52	208.0 (89)	Van Buren	51	274.2 (59)
	Ida	44	273.3 (61)	Wayne	48	305.7 (43)
	Lucas	50	239.2 (79)	Worth	47	303.2 (46)
				Total	972	276.0
Counties with Average Population 10,000 – 20,000	Allamakee	93	226.3 (83)	Hardin	130	319.4 (37)
	Appanoose	127	386.0 (15)	Humboldt	92	348.5 (29)
	Butler	96	274.3 (58)	Iowa	81	207.7 (90)
	Calhoun	59	274.4 (57)	Jefferson	106	328.2 (34)
	Cass	98	305.3 (44)	Keokuk	83	321.7 (36)
	Cedar	94	235.6 (80)	Kossuth	95	266.9 (63)
	Cherokee	71	314.2 (39)	Louisa	104	354.9 (26)
	Chickasaw	78	251.6 (70)	Lyon	33	105.4 (99)
	Clay	121	295.8 (48)	Mitchell	46	178.3 (96)
	Clayton	99	249.4 (73)	Montgomery	113	423.2 (04)
	Crawford	165	361.8 (19)	O'Brien	97	273.2 (62)
	Delaware	100	250.6 (71)	Page	106	316.4 (38)
	Dickinson	94	284.0 (55)	Poweshiek	124	328.0 (35)
	Emmet	105	365.9 (18)	Sac	50	205.8 (91)
	Floyd	148	356.6 (25)	Shelby	63	291.7 (51)
	Franklin	94	360.2 (22)	Tama	173	350.9 (27)
	Greene	65	336.8 (32)	Union	106	359.3 (24)
	Hamilton	111	287.6 (54)	Winnebago	65	294.1 (49)
	Hancock	75	275.7 (56)	Wright	140	398.9 (12)
				Total	3,700	298.8
Counties with Average Population > 20,000	Boone	154	258.0 (67)	Lee	330	416.7 (05)
	Buchanan	150	255.1 (69)	Mahaska	180	313.6 (40)
	Buena Vista	209	373.2 (17)	Marion	175	212.9 (87)
	Carroll	135	255.2 (68)	Marshall	504	401.9 (09)
	Cerro Gordo	364	374.9 (16)	Muscatine	454	386.7 (14)
	Clinton	490	401.0 (11)	Plymouth	154	241.8 (76)
	Des Moines	490	478.0 (01)	Sioux	148	156.9 (97)
	Fayette	152	331.2 (33)	Wapello	393	401.0 (10)
	Henry	172	343.3 (30)	Webster	436	451.8 (02)
	Jackson	141	360.6 (21)	Winneshiek	89	224.7 (84)
	Jasper	259	289.4 (53)	Total	5,579	342.8
MSA Counties	Benton	129	212.9 (88)	Linn	1,725	311.3 (41)
	Black Hawk	1,401	412.3 (06)	Madison	93	241.6 (77)
	Bremer	109	215.8 (85)	Mills	99	260.5 (65)
	Dallas	311	214.2 (86)	Polk	3,981	308.9 (42)
	Dubuque	680	292.0 (50)	Pottawattamie	974	397.9 (13)
	Grundy	43	183.0 (95)	Scott	1,881	407.5 (07)
	Guthrie	58	248.9 (74)	Story	348	188.4 (94)
	Harrison	94	300.3 (47)	Warren	240	227.3 (82)
	Johnson	592	196.2 (93)	Washington	112	201.8 (92)
	Jones	136	304.3 (45)	Woodbury	1,395	434.3 (03)
				Total	14,401	316.8
	State Total	24,652	317.5			

¹Rates per 1,000 births

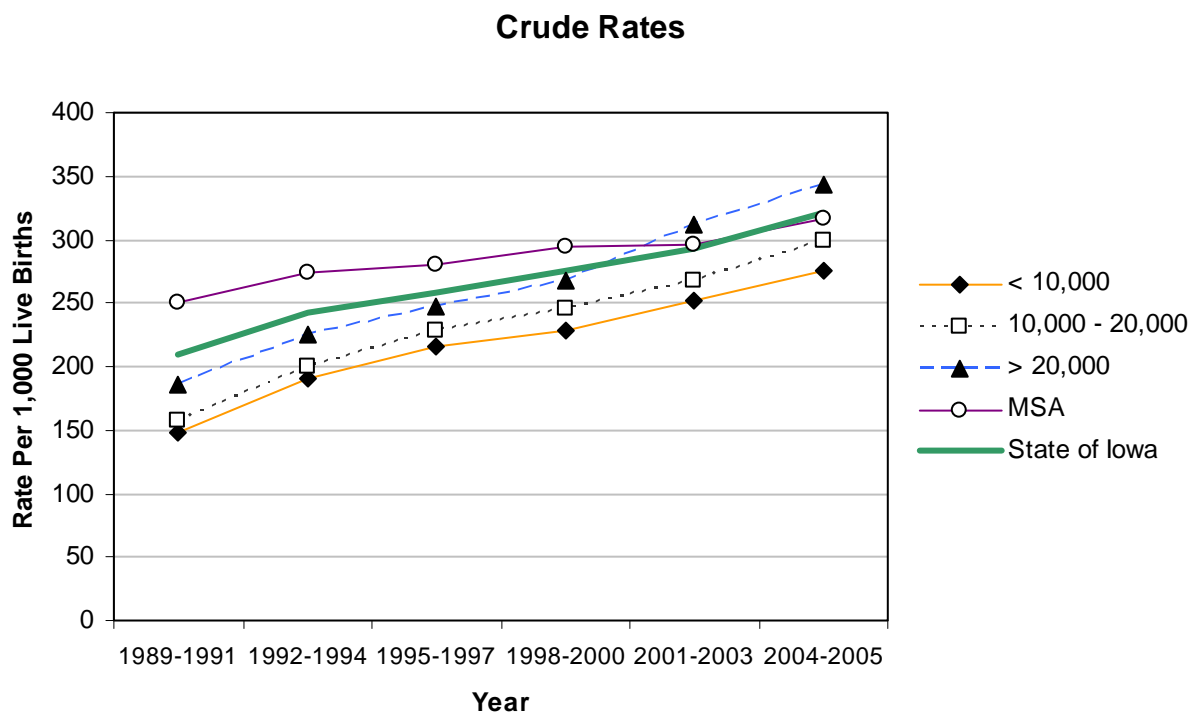
²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Live Births by County Group 1989-2005



Out of Wedlock Births by County Group 1989-2005



Mothers under Age 20 2004-2005

Counties with Average Population < 10,000	County	#	Crude ¹	County	#	Crude ¹
	Adair	9	61.6	Monona	19	96.0
	Adams	*	*	Monroe	16	101.3
	Audubon	19	159.7	Osceola	14	91.5
	Clarke	28	109.4	Palo Alto	15	66.4
	Davis	16	62.7	Pocahontas	13	80.2
	Decatur	21	102.9	Ringgold	13	95.6
	Fremont	20	122.0	Taylor	9	61.2
	Howard	13	52.0	Van Buren	20	107.5
	Ida	19	118.0	Wayne	21	133.8
	Lucas	16	76.6	Worth	14	90.3
				Total	315-319	90.4-90.6
	Counties with Average Population 10,000 – 20,000	Allamakee	33	80.3	Hardin	38
Appanoose		43	130.7	Humboldt	22	83.3
Butler		30	85.7	Iowa	12	30.8
Calhoun		22	102.3	Jefferson	23	71.2
Cass		30	93.5	Keokuk	29	112.4
Cedar		24	60.2	Kossuth	26	73.0
Cherokee		23	101.8	Louisa	37	126.3
Chickasaw		21	67.7	Lyon	17	54.3
Clay		32	78.2	Mitchell	17	65.9
Clayton		25	63.0	Montgomery	38	142.3
Crawford		51	111.8	O'Brien	39	109.9
Delaware		25	62.7	Page	30	89.6
Dickinson		19	57.4	Poweshiek	29	76.7
Emmet		26	90.6	Sac	14	57.6
Floyd		40	96.4	Shelby	14	64.8
Franklin		32	122.6	Tama	51	103.4
Greene		24	124.4	Union	26	88.1
Hamilton		29	75.1	Winnebago	17	76.9
Hancock		21	77.2	Wright	39	111.1
			Total	1,068	86.2	
Counties with Average Population > 20,000	Boone	42	70.4	Lee	90	113.6
	Buchanan	48	81.6	Mahaska	57	99.3
	Buena Vista	79	141.1	Marion	59	71.8
	Carroll	41	77.5	Marshall	177	141.1
	Cerro Gordo	96	98.9	Muscatine	136	115.8
	Clinton	127	103.9	Plymouth	32	50.2
	Des Moines	128	124.9	Sioux	69	73.2
	Fayette	34	74.1	Wapello	114	116.3
	Henry	41	81.8	Webster	113	117.1
	Jackson	35	89.5	Winneshiek	19	48.0
	Jasper	86	96.1	Total	1,623	99.7
	MSA Counties	Benton	28	46.2	Linn	377
Black Hawk		344	101.2	Madison	28	72.7
Bremer		25	49.5	Mills	19	50.0
Dallas		83	57.2	Polk	1,005	78.0
Dubuque		177	76.0	Pottawattamie	264	107.8
Grundy		11	46.8	Scott	504	109.2
Guthrie		16	68.7	Story	58	31.4
Harrison		22	70.3	Warren	70	66.3
Johnson		129	42.8	Washington	32	57.7
Jones		42	94.0	Woodbury	374	116.4
				Total	3,608	79.4
State Total		6,614-8	85.1-85.2			

¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

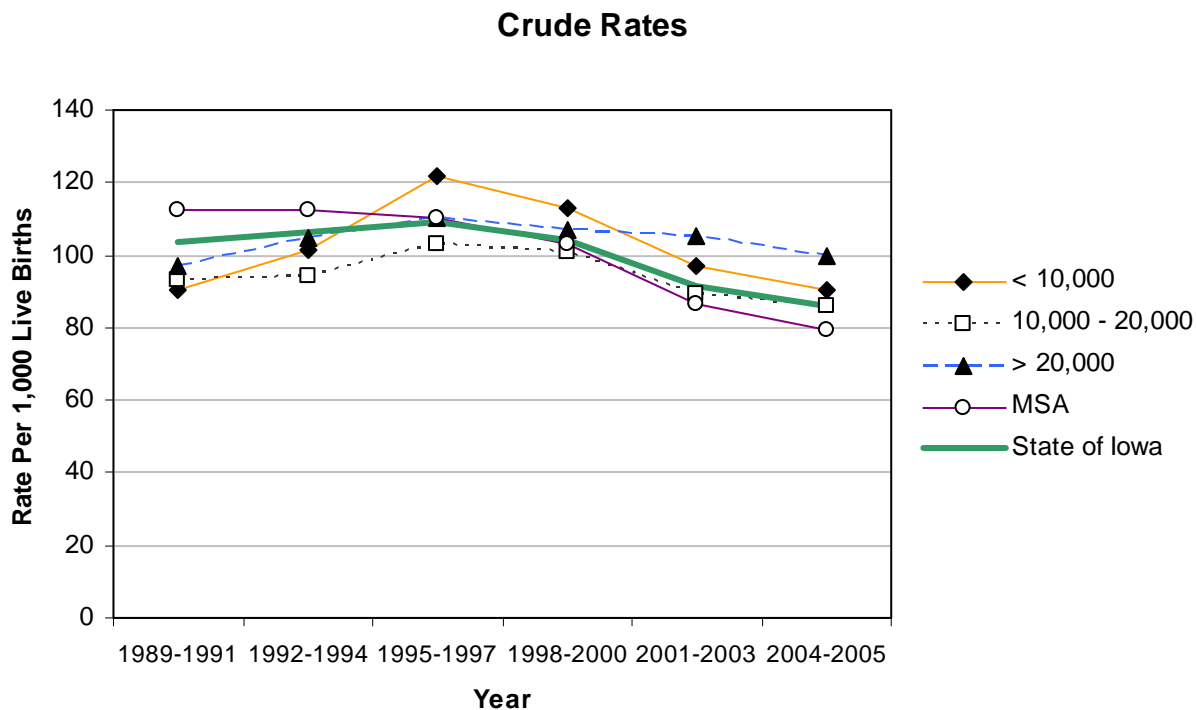
Low Birth Weight (< 2500 Grams) 2004-2005

	Counties with Average Population < 10,000			Counties with Average Population 10,000 – 20,000		
	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	10	68.5	Monona	19	96.0
	Adams	*	*	Monroe	6	38.0
	Audubon	10	84.0	Osceola	9	58.8
	Clarke	21	82.0	Palo Alto	22	97.3
	Davis	13	51.0	Pocahontas	9	55.6
	Decatur	20	98.0	Ringgold	10	73.5
	Fremont	12	73.2	Taylor	9	61.2
	Howard	22	88.0	Van Buren	23	123.7
	Ida	16	99.4	Wayne	9	57.3
	Lucas	8	38.3	Worth	13	83.9
				Total	261-265	74.6-74.8
Counties with Average Population 10,000 – 20,000	Allamakee	32	77.9	Hardin	35	86.0
	Appanoose	37	112.5	Humboldt	12	45.5
	Butler	34	97.1	Iowa	22	56.4
	Calhoun	15	69.8	Jefferson	22	68.1
	Cass	28	87.2	Keokuk	19	73.6
	Cedar	34	85.2	Kossuth	25	70.2
	Cherokee	9	39.8	Louisa	28	95.6
	Chickasaw	23	74.2	Lyon	19	60.7
	Clay	19	46.5	Mitchell	16	62.0
	Clayton	23	57.9	Montgomery	16	59.9
	Crawford	21	46.1	O'Brien	19	53.5
	Delaware	24	60.2	Page	22	65.7
	Dickinson	20	60.4	Poweshiek	21	55.6
	Emmet	24	83.6	Sac	19	78.2
	Floyd	35	84.3	Shelby	14	64.8
	Franklin	11	42.1	Tama	39	79.1
	Greene	12	62.2	Union	27	91.5
	Hamilton	41	106.2	Winnebago	21	95.0
	Hancock	12	44.1	Wright	27	76.9
				Total	877	70.8
Counties with Average Population > 20,000	Boone	28	46.9	Lee	51	64.4
	Buchanan	38	64.6	Mahaska	47	81.9
	Buena Vista	40	71.4	Marion	64	77.9
	Carroll	25	47.3	Marshall	90	71.8
	Cerro Gordo	74	76.2	Muscatine	69	58.8
	Clinton	113	92.5	Plymouth	34	53.4
	Des Moines	61	59.5	Sioux	47	49.8
	Fayette	20	43.6	Wapello	85	86.7
	Henry	34	67.9	Webster	55	57.0
	Jackson	27	69.1	Winneshiek	20	50.5
	Jasper	69	77.1	Total	1,091	67.0
MSA Counties	Benton	26	42.9	Linn	385	69.5
	Black Hawk	299	88.0	Madison	30	77.9
	Bremer	28	55.4	Mills	30	78.9
	Dallas	108	74.4	Polk	940	72.9
	Dubuque	160	68.7	Pottawattamie	194	79.2
	Grundy	25	106.4	Scott	336	72.8
	Guthrie	15	64.4	Story	106	57.4
	Harrison	28	89.5	Warren	64	60.6
	Johnson	185	61.3	Washington	33	59.5
	Jones	29	64.9	Woodbury	259	80.6
				Total	3,280	72.1
State Total		5,509-13	71.0-71.1			

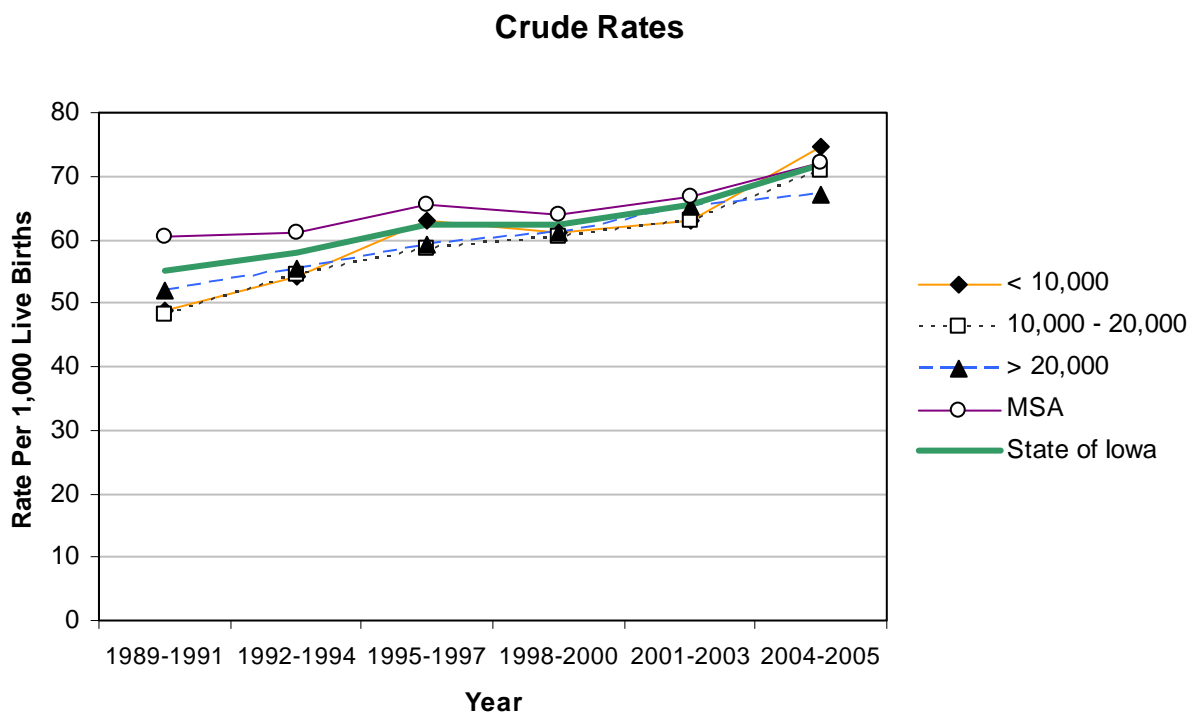
¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Mothers Under Age 20 by County Group 1989-2005



Low Birth Weight (< 2500 grams) by County Group 1989-2005



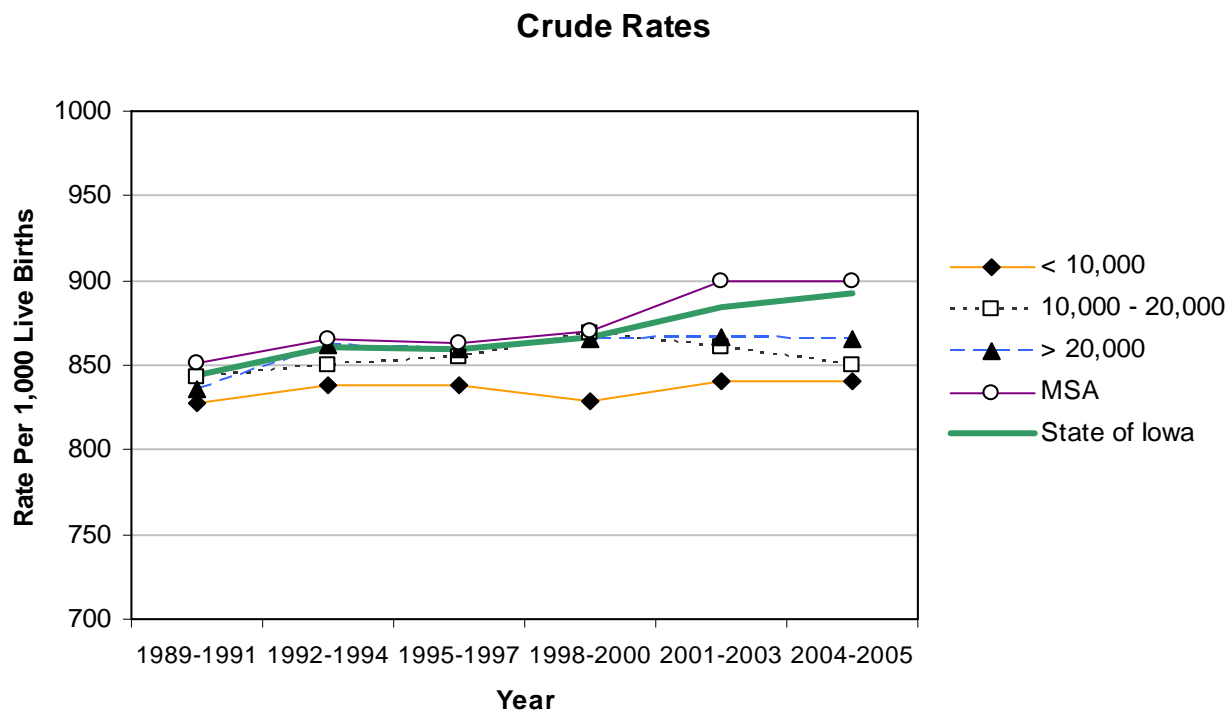
Mothers Who Began Prenatal Care in First Trimester 2004-2005

	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	134	917.8 (20)	Monona	187	944.4 (02)
	Adams	72	900.0 (38)	Monroe	145	917.7 (21)
	Audubon	108	907.6 (30)	Osceola	132	862.7 (61)
	Clarke	216	843.8 (70)	Palo Alto	196	867.3 (56)
	Davis	177	694.1 (97)	Pocahontas	135	833.3 (75)
	Decatur	169	828.4 (76)	Ringgold	106	779.4 (89)
	Fremont	137	835.4 (74)	Taylor	127	863.9 (59)
	Howard	213	852.0 (67)	Van Buren	148	795.7 (85)
	Ida	152	944.1 (03)	Wayne	129	821.7 (80)
	Lucas	156	746.4 (92)	Worth	121	780.6 (88)
				Total	2,960	840.4
Counties with Average Population 10,000 – 20,000	Allamakee	317	771.3 (90)	Hardin	357	877.1 (51)
	Appanoose	288	875.4 (53)	Humboldt	222	840.9 (72)
	Butler	314	897.1 (40)	Iowa	364	933.3 (08)
	Calhoun	195	907.0 (31)	Jefferson	264	817.3 (81)
	Cass	280	872.3 (55)	Keokuk	233	903.1 (34)
	Cedar	372	932.3 (09)	Kossuth	315	884.8 (47)
	Cherokee	213	942.5 (04)	Louisa	267	911.3 (28)
	Chickasaw	265	854.8 (65)	Lyon	280	894.6 (42)
	Clay	363	887.5 (45)	Mitchell	183	709.3 (96)
	Clayton	327	823.7 (77)	Montgomery	231	865.2 (57)
	Crawford	375	822.4 (79)	O'Brien	330	929.6 (11)
	Delaware	344	862.2 (62)	Page	285	850.7 (69)
	Dickinson	285	861.0 (63)	Poweshiek	350	925.9 (16)
	Emmet	226	787.5 (87)	Sac	219	901.2 (37)
	Floyd	272	655.4 (99)	Shelby	198	916.7 (22)
	Franklin	188	720.3 (95)	Tama	401	813.4 (83)
	Greene	170	880.8 (49)	Union	261	884.7 (48)
	Hamilton	348	901.6 (36)	Winnebago	164	742.1 (93)
	Hancock	180	661.8 (98)	Wright	278	792.0 (86)
				Total	10,524	849.9
Counties with Average Population > 20,000	Boone	541	906.2 (32)	Lee	694	876.3 (52)
	Buchanan	484	823.1 (78)	Mahaska	524	912.9 (27)
	Buena Vista	456	814.3 (82)	Marion	753	916.1 (23)
	Carroll	505	954.6 (01)	Marshall	963	767.9 (91)
	Cerro Gordo	712	733.3 (94)	Muscatine	1,047	891.8 (43)
	Clinton	1,112	910.0 (29)	Plymouth	590	926.2 (15)
	Des Moines	863	842.0 (71)	Sioux	825	874.9 (54)
	Fayette	425	925.9 (16)	Wapello	787	803.1 (84)
	Henry	444	886.2 (46)	Webster	834	864.2 (58)
	Jackson	353	902.8 (35)	Winneshiek	342	863.6 (60)
	Jasper	829	926.3 (14)	Total	14,083	865.3
MSA Counties	Benton	571	942.2 (05)	Linn	5,075	915.7 (24)
	Black Hawk	3,120	918.2 (19)	Madison	360	935.1 (07)
	Bremer	470	930.7 (10)	Mills	327	860.5 (64)
	Dallas	1,328	914.6 (25)	Polk	11,548	896.1 (41)
	Dubuque	2,095	899.5 (39)	Pottawattamie	2,087	852.5 (66)
	Grundy	220	936.2 (06)	Scott	3,928	851.0 (68)
	Guthrie	205	879.8 (50)	Story	1,711	926.4 (13)
	Harrison	278	888.2 (44)	Warren	980	928.0 (12)
	Johnson	2,782	922.1 (18)	Washington	464	836.0 (73)
	Jones	404	903.8 (33)	Woodbury	2,935	913.8 (26)
				Total	40,888	899.4
State Total		68,455	881.7			

¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Mothers Who Began Prenatal Care in First Trimester by County Group 1989-2005



Mothers Who Smoked During Pregnancy 2004-2005

	County	#	Crude ¹ (Rank ²)	County	#	Crude ¹ (Rank ²)
Counties with Average Population < 10,000	Adair	32	219.2 (22)	Monona	36	181.8 (44)
	Adams	11	137.5 (75)	Monroe	28	177.2 (50)
	Audubon	22	184.9 (40)	Osceola	19	124.2 (84)
	Clarke	50	195.3 (33)	Palo Alto	33	146.0 (68)
	Davis	35	137.3 (76)	Pocahontas	36	222.2 (19)
	Decatur	42	205.9 (28)	Ringgold	31	227.9 (15)
	Fremont	44	268.3 (05)	Taylor	31	210.9 (26)
	Howard	28	112.0 (88)	Van Buren	36	193.5 (35)
	Ida	34	211.2 (25)	Wayne	33	210.2 (27)
	Lucas	38	181.8 (44)	Worth	27	174.2 (55)
				Total	646	183.4
Counties with Average Population 10,000 – 20,000	Allamakee	68	165.5 (58)	Hardin	81	199.0 (30)
	Appanoose	90	273.6 (03)	Humboldt	71	268.9 (04)
	Butler	55	157.1 (63)	Iowa	52	133.3 (80)
	Calhoun	42	195.3 (32)	Jefferson	59	182.7 (42)
	Cass	74	230.5 (14)	Keokuk	46	178.3 (48)
	Cedar	50	125.3 (83)	Kossuth	65	182.6 (43)
	Cherokee	58	256.6 (07)	Louisa	40	136.5 (78)
	Chickasaw	45	145.2 (69)	Lyon	30	95.8 (95)
	Clay	90	220.0 (21)	Mitchell	18	69.8 (97)
	Clayton	70	176.3 (51)	Montgomery	79	295.9 (01)
	Crawford	59	129.4 (82)	O'Brien	56	157.7 (62)
	Delaware	66	165.4 (59)	Page	75	223.9 (17)
	Dickinson	59	178.2 (49)	Poweshiek	88	232.8 (13)
	Emmet	49	170.7 (56)	Sac	38	156.4 (64)
	Floyd	76	183.1 (41)	Shelby	38	175.9 (53)
	Franklin	32	122.6 (87)	Tama	69	140.0 (72)
	Greene	43	222.8 (18)	Union	70	237.3 (12)
	Hamilton	73	189.1 (37)	Winnebago	43	194.6 (34)
	Hancock	29	106.6 (92)	Wright	76	216.5 (23)
				Total	2,222	179.4
Counties with Average Population > 20,000	Boone	108	180.9 (46)	Lee	223	281.6 (02)
	Buchanan	82	139.5 (73)	Mahaska	122	212.5 (24)
	Buena Vista	60	107.1 (91)	Marion	116	141.1 (70)
	Carroll	73	138.0 (74)	Marshall	194	154.7 (65)
	Cerro Gordo	158	162.7 (61)	Muscatine	194	165.2 (60)
	Clinton	326	266.8 (06)	Plymouth	79	124.0 (85)
	Des Moines	230	224.4 (16)	Sioux	58	61.5 (98)
	Fayette	102	222.2 (19)	Wapello	176	179.6 (47)
	Henry	119	237.5 (11)	Webster	230	238.3 (10)
	Jackson	75	191.8 (36)	Winneshiek	44	111.1 (89)
	Jasper	182	203.4 (29)	Total	2,951	181.3
MSA Counties	Benton	81	133.7 (79)	Linn	844	152.3 (66)
	Black Hawk	594	174.8 (54)	Madison	57	148.1 (67)
	Bremer	56	110.9 (90)	Mills	75	197.4 (31)
	Dallas	137	94.4 (96)	Polk	1,761	136.6 (77)
	Dubuque	307	131.8 (81)	Pottawattamie	625	255.3 (08)
	Grundy	29	123.4 (86)	Scott	870	188.5 (38)
	Guthrie	41	176.0 (52)	Story	178	96.4 (94)
	Harrison	78	249.2 (09)	Warren	149	141.1 (71)
	Johnson	150	49.7 (99)	Washington	59	106.3 (93)
	Jones	75	167.8 (57)	Woodbury	601	187.1 (39)
				Total	6,767	148.8
	State Total	12,586	162.1			

¹Rates per 1,000 births

²Rank among 99 Iowa counties

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

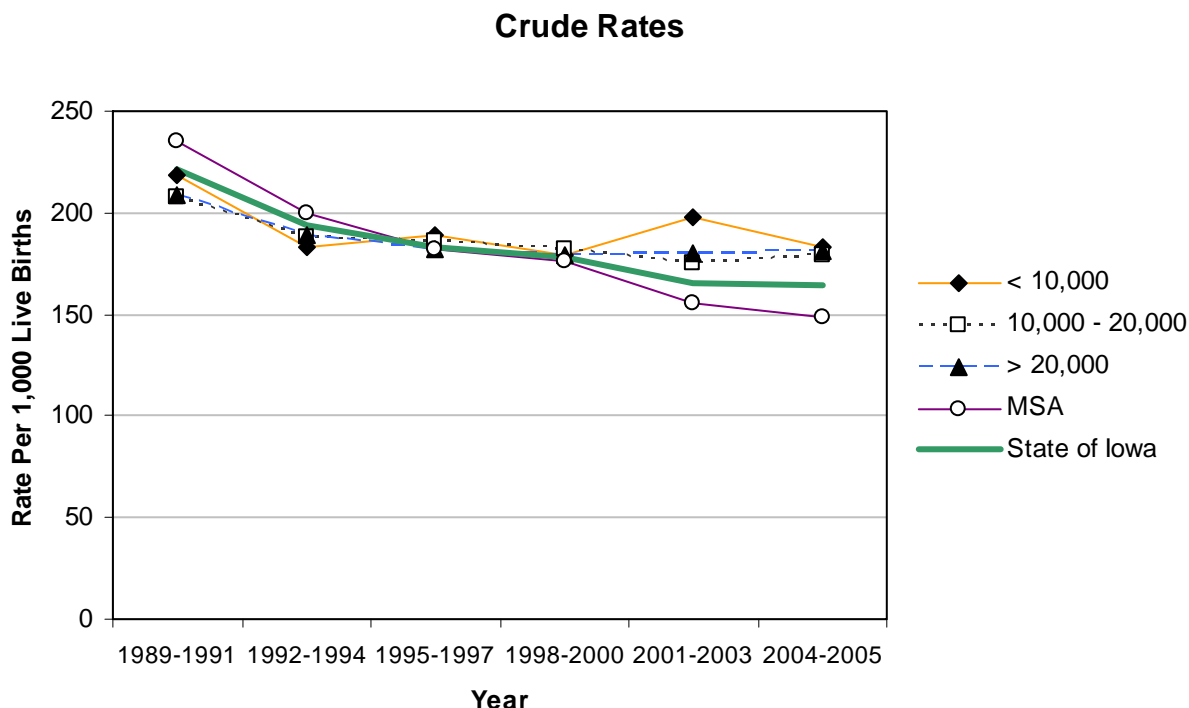
Mothers Who Drank During Pregnancy 2004-2005

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	*	*
	Lucas	*	*	Worth	*	*
				Total	19	5.4
Counties with Average Population 10,000 – 20,000	Allamakee	6	18.2	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	*	*
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	*	*	Louisa	5	17.1
	Chickasaw	7	17.1	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	5	11.0	Montgomery	*	*
	Crawford	5	12.5	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	6	14.5	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	6	12.2
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	6	18.2	Wright	*	*
				Total	96	7.8
Counties with Average Population > 20,000	Boone	6	10.1	Lee	9	11.4
	Buchanan	*	*	Mahaska	*	*
	Buena Vista	*	*	Marion	*	*
	Carroll	*	*	Marshall	12	9.6
	Cerro Gordo	*	*	Muscatine	8	6.8
	Clinton	11	9.0	Plymouth	*	*
	Des Moines	6	5.9	Sioux	5	5.3
	Fayette	7	15.3	Wapello	*	*
	Henry	*	*	Webster	6	6.2
	Jackson	*	*	Winneshiek	*	*
	Jasper	*	*	Total	98	6.0
MSA Counties	Benton	*	*	Linn	51	9.2
	Black Hawk	18	5.3	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	9	6.2	Polk	84	6.5
	Dubuque	14	6.0	Pottawattamie	14	5.7
	Grundy	*	*	Scott	66	14.3
	Guthrie	*	*	Story	27	14.6
	Harrison	*	*	Warren	5	4.7
	Johnson	10	3.3	Washington	*	*
	Jones	*	*	Woodbury	19	5.9
				Total	330	7.3
	State Total	543	7.0			

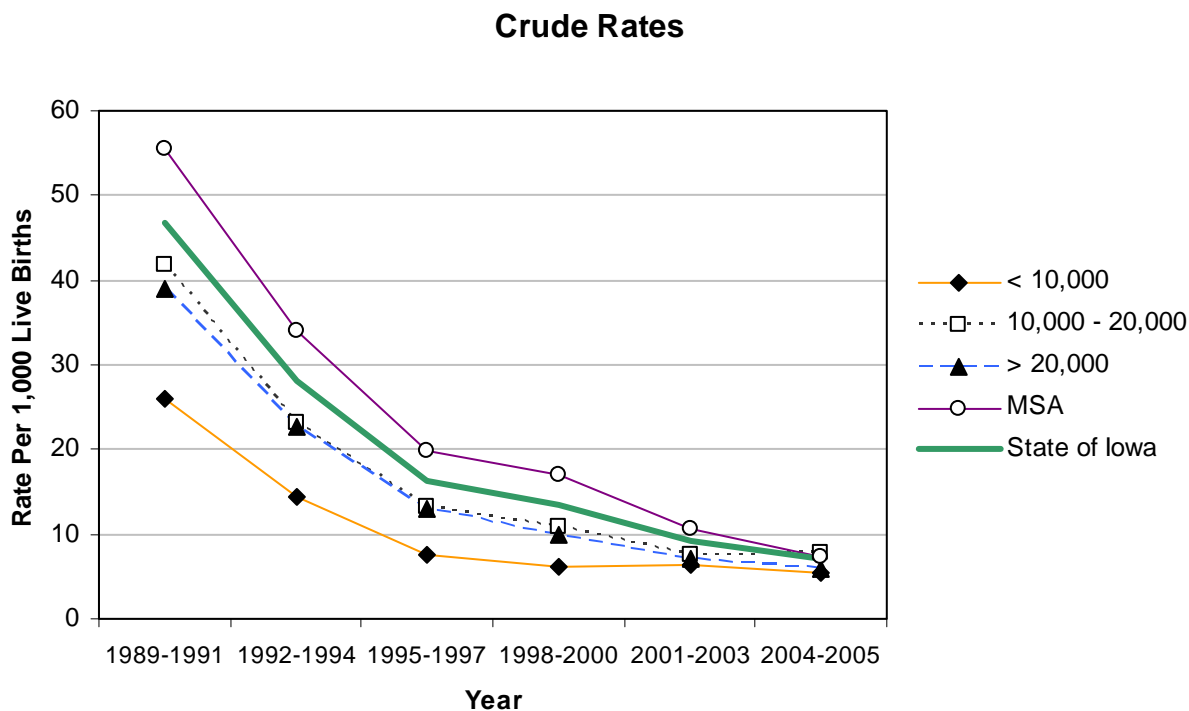
¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Mothers Who Smoked During Pregnancy by County Group 1989-2005



Mothers Who Drank During Pregnancy by County Group 1989-2005



Fetal Deaths 2004-2005

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	*	*
	Lucas	*	*	Worth	*	*
				Total	18	5.1
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	6	15.4
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	*	*	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	*	*	Montgomery	*	*
	Crawford	*	*	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	*	*	Wright	*	*
				Total	58	4.7
Counties with Average Population > 20,000	Boone	*	*	Lee	5	6.3
	Buchanan	7	11.9	Mahaska	*	*
	Buena Vista	5	8.9	Marion	7	8.5
	Carroll	*	*	Marshall	6	4.8
	Cerro Gordo	6	6.2	Muscatine	7	6.0
	Clinton	6	4.9	Plymouth	*	*
	Des Moines	7	6.8	Sioux	*	*
	Fayette	*	*	Wapello	6	6.1
	Henry	*	*	Webster	*	*
	Jackson	*	*	Winneshiek	*	*
	Jasper	5	5.6	Total	85	5.2
MSA Counties	Benton	*	*	Linn	36	6.5
	Black Hawk	19	5.6	Madison	5	13.0
	Bremer	*	*	Mills	*	*
	Dallas	6	4.1	Polk	72	5.6
	Dubuque	15	6.4	Pottawattamie	10	4.1
	Grundy	*	*	Scott	33	7.1
	Guthrie	*	*	Story	12	6.5
	Harrison	*	*	Warren	*	*
	Johnson	12	4.0	Washington	5	9.0
	Jones	5	11.2	Woodbury	13	4.0
				Total	256	5.6
	State Total	417	5.4			

¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

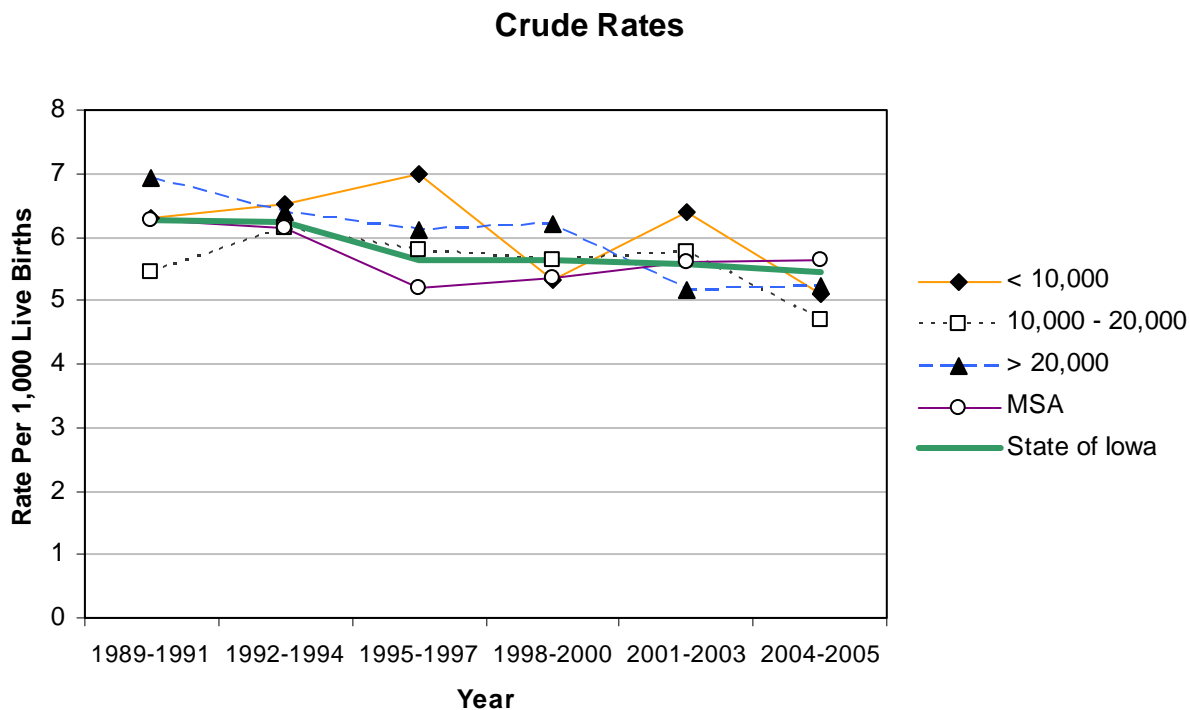
Neonatal Deaths 2004-2005

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	*	*
	Lucas	*	*	Worth	*	*
				Total	12	3.4
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	*	*
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	*	*	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	*	*	Montgomery	*	*
	Crawford	*	*	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	*	*	Wright	*	*
				Total	32	2.6
Counties with Average Population > 20,000	Boone	*	*	Lee	5	6.3
	Buchanan	*	*	Mahaska	*	*
	Buena Vista	*	*	Marion	*	*
	Carroll	*	*	Marshall	*	*
	Cerro Gordo	*	*	Muscatine	*	*
	Clinton	9	7.4	Plymouth	*	*
	Des Moines	*	*	Sioux	5	5.3
	Fayette	*	*	Wapello	*	*
	Henry	*	*	Webster	*	*
	Jackson	*	*	Winneshiek	*	*
	Jasper	*	*	Total	57	3.5
MSA Counties	Benton	*	*	Linn	19	3.4
	Black Hawk	7	2.1	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	*	*	Polk	51	4.0
	Dubuque	8	3.4	Pottawattamie	15	6.1
	Grundy	*	*	Scott	16	3.5
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	*	*
	Johnson	9	3.0	Washington	*	*
	Jones	*	*	Woodbury	10	3.1
				Total	156	3.4
	State Total	257	3.3			

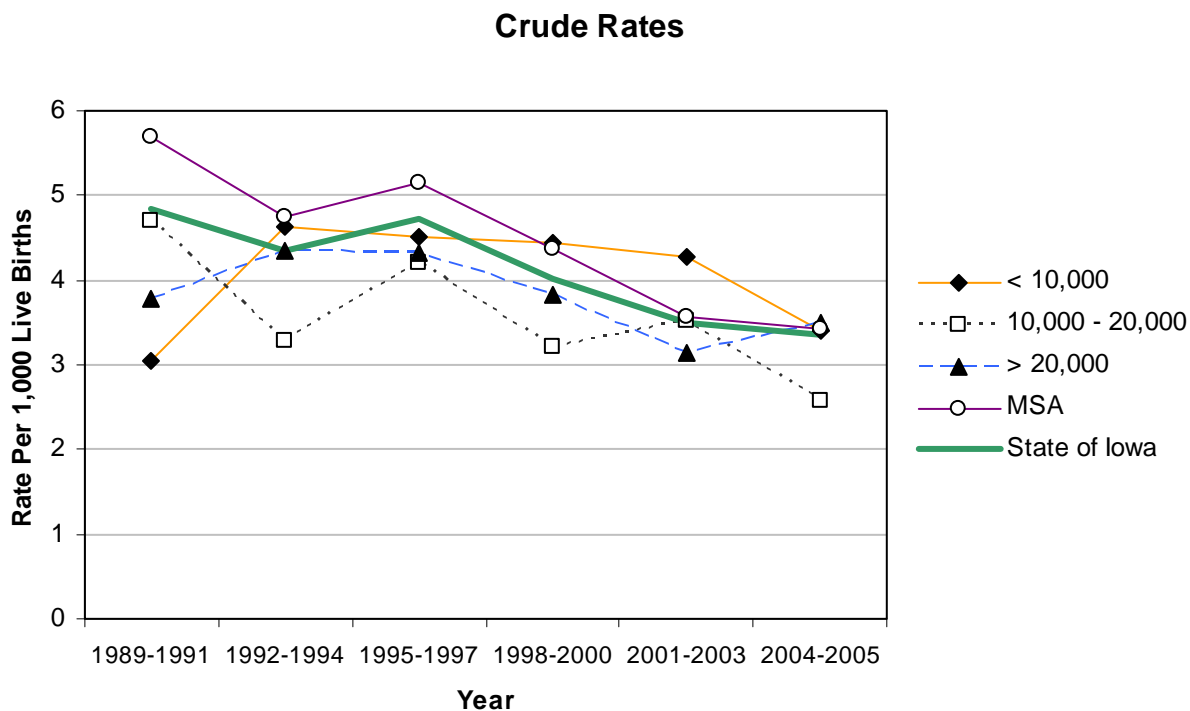
¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Fetal Deaths by County Group 1989-2005



Neonatal Deaths by County Group 1989-2005



Perinatal Deaths 2004-2005

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	5	31.8
	Lucas	*	*	Worth	*	*
				Total	30	8.5
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	6	14.7
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	9	23.1
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	*	*	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	*	*	Montgomery	*	*
	Crawford	*	*	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	*	*	Wright	*	*
				Total	90	7.3
Counties with Average Population > 20,000	Boone	6	10.1	Lee	10	12.6
	Buchanan	11	18.7	Mahaska	5	8.7
	Buena Vista	7	12.5	Marion	9	10.9
	Carroll	*	*	Marshall	10	8.0
	Cerro Gordo	7	7.2	Muscatine	8	6.8
	Clinton	15	12.3	Plymouth	*	*
	Des Moines	9	8.8	Sioux	6	6.4
	Fayette	*	*	Wapello	9	9.2
	Henry	*	*	Webster	*	*
	Jackson	*	*	Winneshiek	*	*
	Jasper	8	8.9	Total	142	8.7
MSA Counties	Benton	5	8.3	Linn	55	9.9
	Black Hawk	26	7.7	Madison	6	15.6
	Bremer	*	*	Mills	*	*
	Dallas	10	6.9	Polk	123	9.5
	Dubuque	23	9.9	Pottawattamie	25	10.2
	Grundy	*	*	Scott	49	10.6
	Guthrie	6	25.8	Story	16	8.7
	Harrison	*	*	Warren	*	*
	Johnson	21	7.0	Washington	6	10.8
	Jones	5	11.2	Woodbury	23	7.2
				Total	412	9.1
	State Total	674	8.7			

¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Infant Deaths 2004-2005

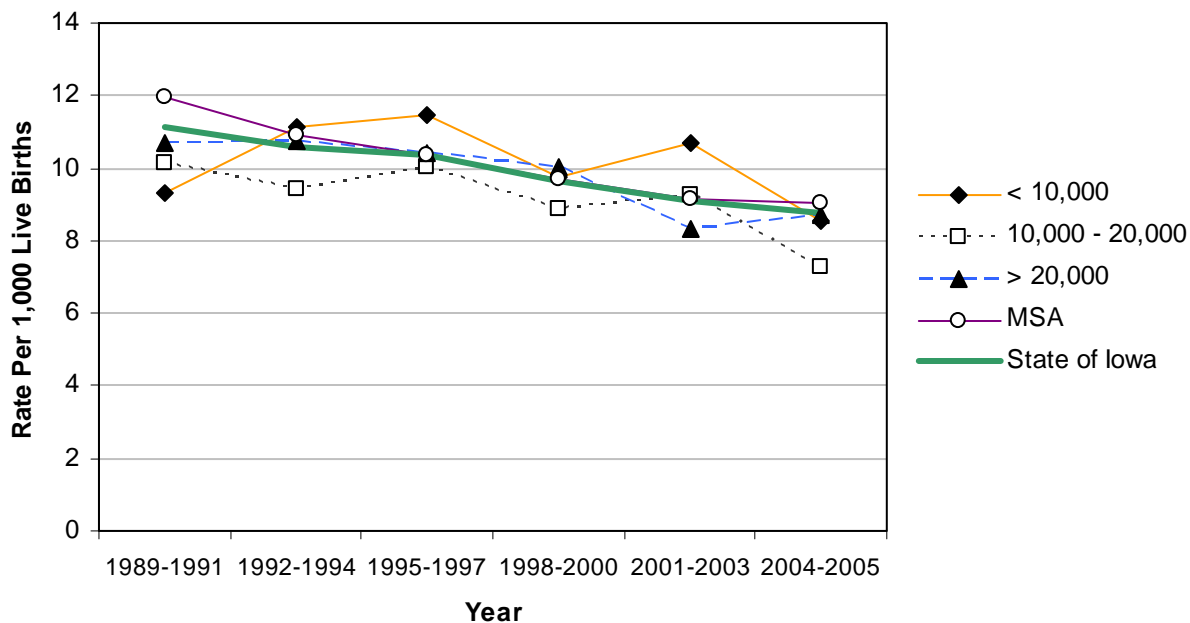
	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	*	*
	Lucas	*	*	Worth	*	*
				Total	15	4.3
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	*	*
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	*	*	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	*	*	Montgomery	*	*
	Crawford	*	*	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	*	*	Wright	5	14.2
				Total	45	3.6
Counties with Average Population > 20,000	Boone	*	*	Lee	6	7.6
	Buchanan	5	8.5	Mahaska	*	*
	Buena Vista	*	*	Marion	*	*
	Carroll	*	*	Marshall	5	4.0
	Cerro Gordo	*	*	Muscatine	*	*
	Clinton	11	9.0	Plymouth	8	12.6
	Des Moines	*	*	Sioux	5	5.3
	Fayette	*	*	Wapello	6	6.1
	Henry	*	*	Webster	7	7.3
	Jackson	*	*	Winneshiek	*	*
	Jasper	6	6.7	Total	95	5.8
MSA Counties	Benton	5	8.3	Linn	31	5.6
	Black Hawk	12	3.5	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	5	3.4	Polk	79	6.1
	Dubuque	11	4.7	Pottawattamie	20	8.2
	Grundy	*	*	Scott	30	6.5
	Guthrie	*	*	Story	10	5.4
	Harrison	*	*	Warren	*	*
	Johnson	11	3.6	Washington	*	*
	Jones	*	*	Woodbury	15	4.7
				Total	248	5.5
	State Total	403	5.2			

¹Rates per 1,000 births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

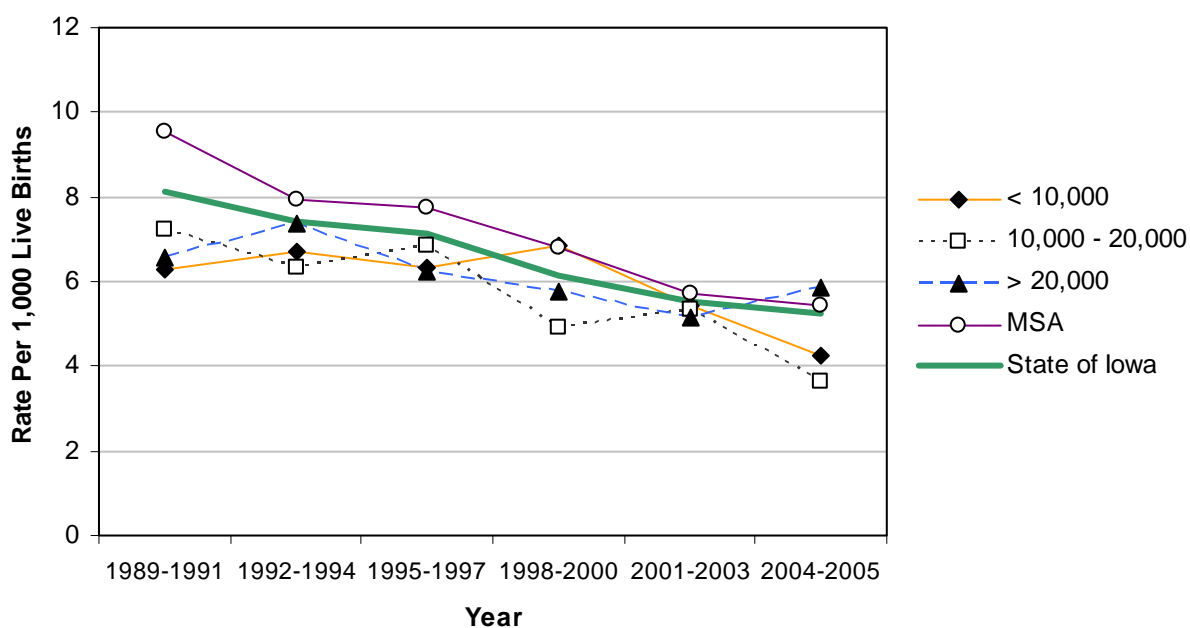
Perinatal Deaths by County Group 1989-2005

Crude Rates



Infant Deaths by County Group 1989-2005

Crude Rates



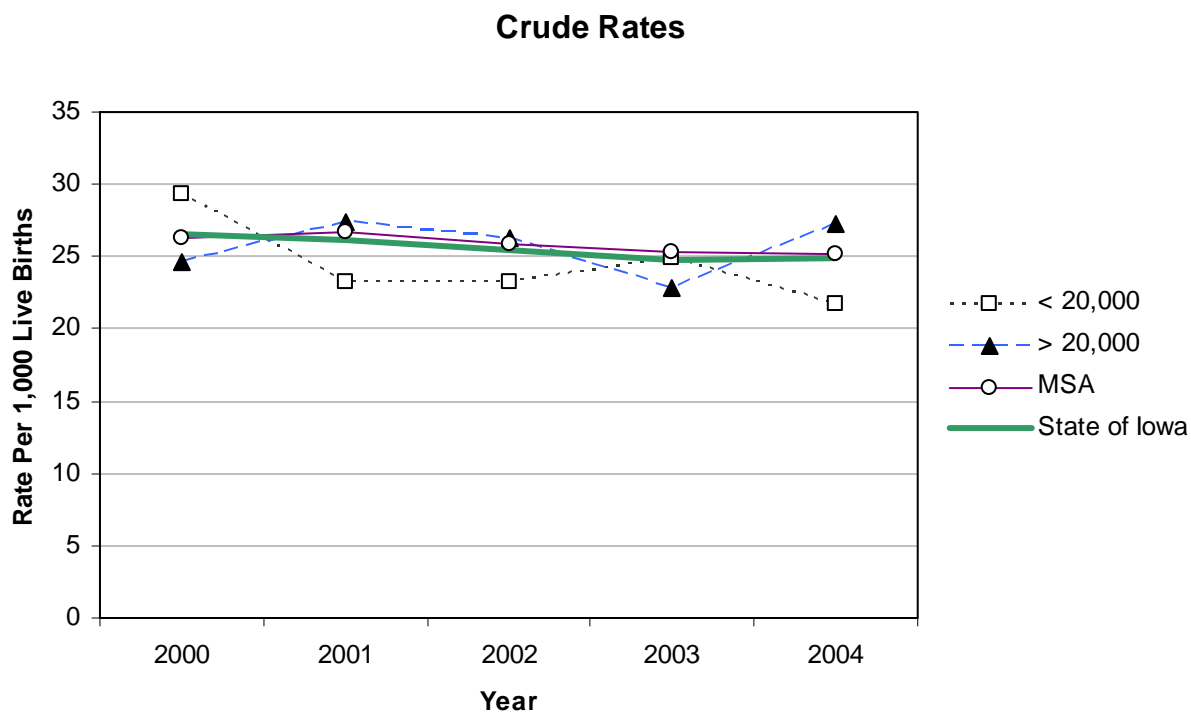
Birth Defects 2002-2004

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	5	16.5
	Adams	6	47.2	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	8	21.7	Palo Alto	5	15.2
	Davis	6	16.6	Pocahontas	5	23.0
	Decatur	*	*	Ringgold	6	34.5
	Fremont	*	*	Taylor	*	*
	Howard	5	15.2	Van Buren	8	31.1
	Ida	7	28.2	Wayne	6	25.2
	Lucas	7	23.6	Worth	*	*
				Total	97	19.1
Counties with Average Population 10,000 – 20,000	Allamakee	10	17.8	Hardin	14	23.2
	Appanoose	18	37.4	Humboldt	5	14.0
	Butler	17	34.3	Iowa	21	37.1
	Calhoun	8	26.7	Jefferson	12	26.8
	Cass	11	24.5	Keokuk	5	12.4
	Cedar	21	35.4	Kossuth	14	27.8
	Cherokee	7	20.4	Louisa	21	41.7
	Chickasaw	14	33.7	Lyon	*	*
	Clay	20	32.2	Mitchell	*	*
	Clayton	12	20.1	Montgomery	9	23.7
	Crawford	15	21.4	O'Brien	6	12.0
	Delaware	16	25.9	Page	12	23.8
	Dickinson	*	*	Poweshiek	16	28.1
	Emmet	*	*	Sac	6	18.5
	Floyd	17	30.7	Shelby	11	27.8
	Franklin	8	21.4	Tama	16	23.0
	Greene	13	42.8	Union	10	23.5
	Hamilton	12	21.4	Winnebago	13	40.2
	Hancock	11	32.8	Wright	11	20.8
				Total	443	24.5
Counties with Average Population > 20,000	Boone	30	33.4	Lee	31	26.2
	Buchanan	23	25.8	Mahaska	27	33.8
	Buena Vista	23	29.7	Marion	39	32.2
	Carroll	17	22.2	Marshall	43	24.5
	Cerro Gordo	48	32.1	Muscatine	40	21.8
	Clinton	46	26.7	Plymouth	19	20.4
	Des Moines	39	25.7	Sioux	16	11.6
	Fayette	15	23.0	Wapello	44	31.2
	Henry	16	23.2	Webster	29	20.2
	Jackson	17	27.2	Winneshiek	7	12.5
	Jasper	39	29.6	Total	608	25.5
MSA Counties	Benton	21	22.1	Linn	216	26.1
	Black Hawk	165	33.9	Madison	15	25.1
	Bremer	19	26.1	Mills	9	17.5
	Dallas	50	27.0	Polk	479	25.4
	Dubuque	93	25.9	Pottawattamie	87	23.8
	Grundy	10	28.1	Scott	176	25.9
	Guthrie	7	17.3	Story	49	17.9
	Harrison	11	22.8	Warren	40	26.8
	Johnson	107	23.7	Washington	19	20.8
	Jones	17	26.3	Woodbury	116	23.9
				Total	1,706	25.4
	State Total	2,854	25.0			

¹Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics, Birth Certificates

Birth Defects by County Group 2000-2004¹



¹ < 10,000 and 10,000-20,000 combined due to substantial year to year variation

Selected Birth Defects in Iowa 2002-2004

Defect Name	Defects	Crude Rate ¹
Anencephalus	37	0.32
Spina bifida without anencephalus	54	0.47
Hydrocephalus without spina bifida	103	0.90
Encephalocele	9	0.08
Microcephalus	101	0.89
Anophthalmia/microthemia	31	0.27
Congenital cataract	27	0.24
Anotia/microtia	25	0.22
Common truncus	11	0.10
Transposition of great arteries	62	0.54
Tetralogy of Fallot	39	0.34
Ventricular septal defect	537	4.71
Atrial septal defect	333	2.92
Endocardial cushion defect	76	0.67
Pulmonary valve atresia and stenosis	114	1.00
Tricuspid valve atresia and stenosis	11	0.10
Ebsteins's anomaly	15	0.13
Aortic valve stenosis	48	0.42
Hypoplastic left heart syndrome	29	0.25
Patent ductus arteriosus	301	2.64
Coarctation of aorta	52	0.46
Cleft palate without cleft lip	99	0.87
Cleft lip with and without cleft palate	156	1.37
Choanal atresia	27	0.24
Esophageal atresia/tracheoesophageal fistula	30	0.26
Rectal and large intestinal atresia/stenosis	60	0.53
Pyloric stenosis	354	3.10
Hirschsprung's disease (congenital megacolon)	24	0.21
Biliary atresia	7	0.06
Renal agenesis/hypoplasia	82	0.72
Bladder exstrophy	10	0.09
Obstructive genitourinary defect	313	2.74
Hypospadias and epispadias	256	2.24
Reduction deformity, upper limbs	55	0.48
Reduction deformity, lower limbs	26	0.23
Gastroschisis	64	0.56
Omphalocele	30	0.26
Congenital hip dislocation	99	0.87
Diaphragmatic hernia	11	0.10
Trisomy 13	11	0.10
Down syndrome	183	1.60
Trisomy 18	30	0.26
Amniotic bands	12	0.11

¹Rates per 1,000 live births

Source: Iowa Birth Defects Registry, The University of Iowa

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Infectious Diseases

Fifty-one specific infectious diseases are listed as reportable conditions in the Iowa Administrative Code 641, Chapter 1, although many other diseases are reportable as rare or unusual diseases. Disease surveillance, consulting, and outbreak management are provided by the Center for Acute Disease Epidemiology. The Bureau of Prevention and Immunization provided education programs and vaccine distribution services. Local public health nurses or

HIGHLIGHTS...

- ✓ IDPH received 1963 disease reports of cases of Mumps in 2006.
- ✓ IDPH received 1106 disease reports of cases of Pertussis in 2005.
- ✓ IDPH followed-up on 475 cases of Salmonella in 2006

disease prevention specialists, in conjunction with the staff epidemiologists at the Iowa Department of Public Health, interview persons with selected conditions or diseases and conduct investigations of disease outbreaks. Disease prevention steps include promoting vaccinations, partner counseling/referral services for sexually transmitted diseases, and disease

education initiatives.

Increases in reported cases of certain infectious diseases are often the result of specific outbreak situations:

- Increases in Hepatitis A cases reported from 1996–1998 were due to outbreaks in Woodbury (1996) and Polk (1997-1998) counties and were related to transmission among methamphetamine users.
- An imported case of measles occurred in 2004 in an Iowa resident returning from India. Two additional cases of measles were traced back to the imported case.
- Iowa experienced large outbreaks of pertussis and mumps cases statewide during the 2004-2006 timeframe.
- The outbreak of rubella in 1999 originated in a Hispanic migrant worker population. Immunization clinics were held in a number of packing plants across the state to contain the outbreak.

Infectious diseases continue to be a concern, and IDPH is working daily to control local outbreaks.

Sexually Transmitted Diseases¹ 2005-2006

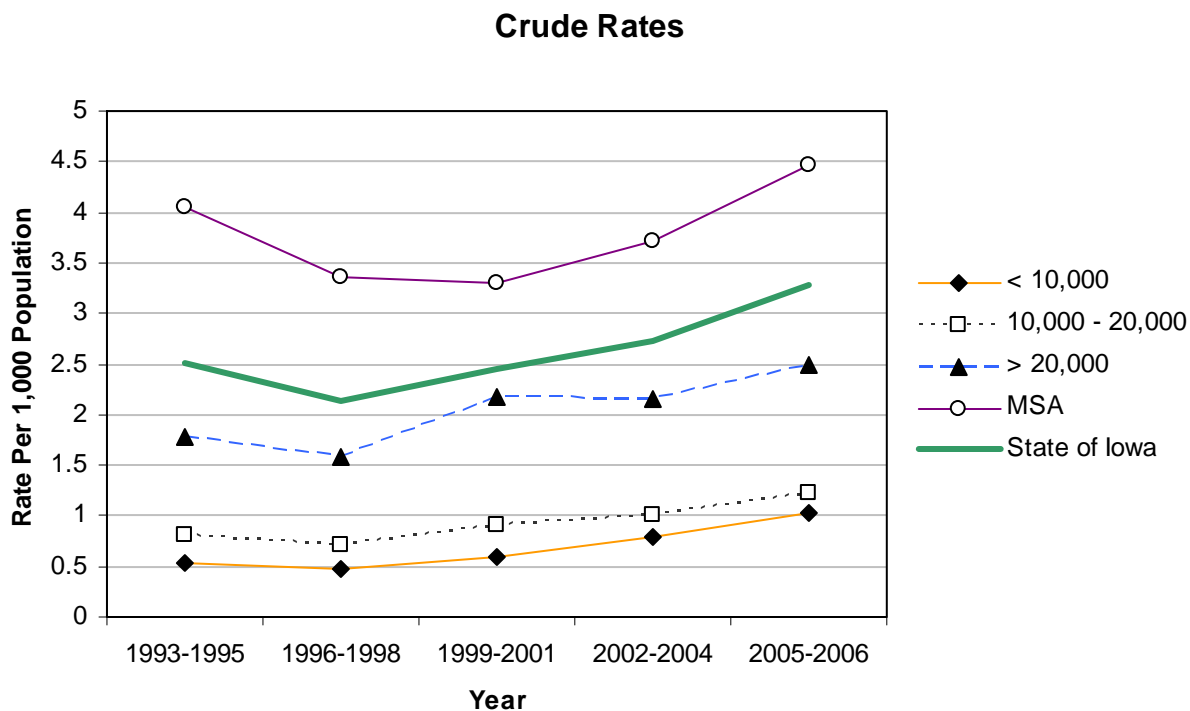
	Counties with Average Population < 10,000			Counties with Average Population 10,000 – 20,000		
	County	#	Crude Rate ²	County	#	Crude Rate ²
Counties with Average Population < 10,000	Adair	13	0.8	Monona	25	1.3
	Adams	10	1.2	Monroe	12	0.8
	Audubon	14	1.1	Osceola	*	*
	Clarke	36	2.0	Palo Alto	30	1.6
	Davis	8	0.5	Pocahontas	11	0.7
	Decatur	21	1.2	Ringgold	10	0.9
	Fremont	17	1.1	Taylor	6	0.5
	Howard	20	1.0	Van Buren	19	1.2
	Ida	10	0.7	Wayne	12	0.9
	Lucas	24	1.3	Worth	14	0.9
				Total	312-316	0.8-1.0
Counties with Average Population 10,000 – 20,000	Allamakee	37	1.3	Hardin	45	1.3
	Appanoose	45	1.7	Humboldt	62	3.1
	Butler	32	1.1	Iowa	44	1.4
	Calhoun	11	0.5	Jefferson	39	1.2
	Cass	26	0.9	Keokuk	35	1.6
	Cedar	50	1.4	Kossuth	19	0.6
	Cherokee	14	0.6	Louisa	42	1.8
	Chickasaw	25	1.0	Lyon	5	0.2
	Clay	37	1.1	Mitchell	9	0.4
	Clayton	25	0.7	Montgomery	39	1.7
	Crawford	71	2.1	O'Brien	14	0.5
	Delaware	25	0.7	Page	34	1.0
	Dickinson	33	1.0	Poweshiek	68	1.8
	Emmet	37	1.8	Sac	17	0.8
	Floyd	49	1.5	Shelby	23	0.9
	Franklin	26	1.2	Tama	89	2.5
	Greene	18	0.9	Union	37	1.5
	Hamilton	26	0.8	Winnebago	37	1.6
	Hancock	27	1.2	Wright	45	1.7
				Total	1,317	1.2
Counties with Average Population > 20,000	Boone	90	1.7	Lee	194	2.7
	Buchanan	50	1.2	Mahaska	101	2.3
	Buena Vista	55	1.4	Marion	83	1.3
	Carroll	41	1.0	Marshall	303	3.8
	Cerro Gordo	212	2.4	Muscatine	223	2.6
	Clinton	347	3.5	Plymouth	59	1.2
	Des Moines	460	5.6	Sioux	49	0.8
	Fayette	61	1.4	Wapello	250	3.5
	Henry	91	2.2	Webster	367	4.7
	Jackson	56	1.4	Winneshiek	62	1.5
	Jasper	90	1.2	Total	3,244	2.5
MSA Counties	Benton	66	1.2	Linn	1,866	4.6
	Black Hawk	1,732	6.9	Madison	47	1.5
	Bremer	60	1.3	Mills	38	1.2
	Dallas	113	1.1	Polk	4,295	5.3
	Dubuque	646	3.5	Pottawattamie	467	2.6
	Grundy	20	0.8	Scott	2,286	7.1
	Guthrie	12	0.5	Story	559	3.5
	Harrison	21	0.7	Warren	132	1.5
	Johnson	1,109	4.7	Washington	72	1.7
	Jones	51	1.2	Woodbury	1,023	5.0
				Total	14,615	4.5
State Total		19,488-92	3.2-3.3			

¹Includes syphilis, gonorrhea, and chlamydia, but not latent cases (infection > 1 year)

²Rates per 1,000 population

Source: Disease Prevention Program, Iowa Department of Public Health

Sexually Transmitted Diseases by County Group 1993-2006



Selected Infectious Diseases State of Iowa 1998-2006

	Number of Cases Reported								
	1998	1999	2000	2001	2002	2003	2004	2005	2006
AIDS	60	78	79	80	75	76	69	78	78
Campylobacteriosis	455	467	499	467	427	458	559	537	449
Chlamydia	5,173	5,511	5,994	5,716	6,236	6,462	6,973	7,390	8,399
Cryptosporidiosis	66	56	77	82	49	122	90	122	230
E. coli	93	114	180	81	122	103	124	108	161
Giardiasis	429	377	420	345	315	277	301	280	302
Gonorrhea	1,615	1,365	1,380	1,424	1,495	1,544	1,254	1,606	1,981
Hepatitis A	400	161	67	41	72	40	50	22	13
Measles	0	0	0	0	0	0	3	0	0
Mumps	11	8	8	1	1	2	2	6	1,963
Pertussis	78	111	67	167	230	182	1,066	1,106	342
Rubella	0	30	0	1	0	0	0	0	0
Salmonella	375	260	373	339	509	413	435	410	475
Shigellosis	69	74	569	367	122	93	64	103	134
Syphilis ¹	5	9	11	5	10	12	6	9	21
Tuberculosis	55	58	37	42	31	40	47	55	40

¹Primary or secondary

Source: Bureau of Infectious Diseases, Iowa Department of Public Health

Cancer Incidence and Mortality

Cancer is the second leading cause of death in Iowa. From 1996 through 2004, 57,735 Iowans died from cancer and 139,326 invasive cancers were newly diagnosed. During this period, cancer accounted for 23% of deaths in Iowa. Although it occurs in people of all ages, more than 80 percent of new cancers are diagnosed in those 55 years of age and older.

For all cancer incidence and mortality, the age-adjusted rates by county grouping increased slightly as the average population increased between the three time periods spanning 1978 through 1995. For the 1996-2004 period, these rates show little difference. The crude rates, however, show the opposite trend, as these rates were highest in counties with average populations < 10,000. This reflects a larger proportion of older people in the smaller, more rural counties (see tables and graph in Demographics). Since the 1990s, the

FOUR PRIMARY TYPES OF CANCER IN IOWA ...

Prostate
Female Breast
Lung
Colorectum

MOST COMMON CANCERS IN IOWA

Females

Breast
Colorectum
Lung

Males

Prostate
Lung
Colorectum

Children (0-19)

Leukemia
Brain and other central nervous system
Lymphomas

U.S. and Iowa have experienced a decline in age-adjusted cancer mortality rates. Today, less than half of Iowans newly diagnosed with a cancer will die from it. Survival rates, however, vary considerably by cancer site. As the survival rate decreases, the number of cancer deaths gets closer to the number of newly diagnosed cancers.

Tobacco use is the leading modifiable risk factor for cancer, and is associated with cancers of the lung, oral cavity (excluding lip),

esophagus, larynx, pancreas, stomach, uterine cervix, urinary bladder, and kidney. Alcohol consumption is also a known risk factor for cancers of the oral cavity (excluding lip), esophagus, and larynx. Ongoing research indicates that dietary factors may play an important role in the occurrence of cancers of the prostate and colorectum. Other important risk factors include obesity for cancer of the uterine corpus, excessive sunlight exposure for skin melanoma, and genetic predisposition (or positive family history) for colorectal, prostate, and breast cancers.

The State Health Registry of Iowa has been recording the occurrence of cancer in Iowa since 1973. It receives mortality data from the Iowa Department of Public Health (IDPH). The Registry's incidence and IDPH's mortality databases have been used to generate the cancer incidence and cancer mortality statistics provided in this section of the 2007 Iowa Health Fact Book via a software program called SEER*Stat, which is provided by the National Cancer Institute.

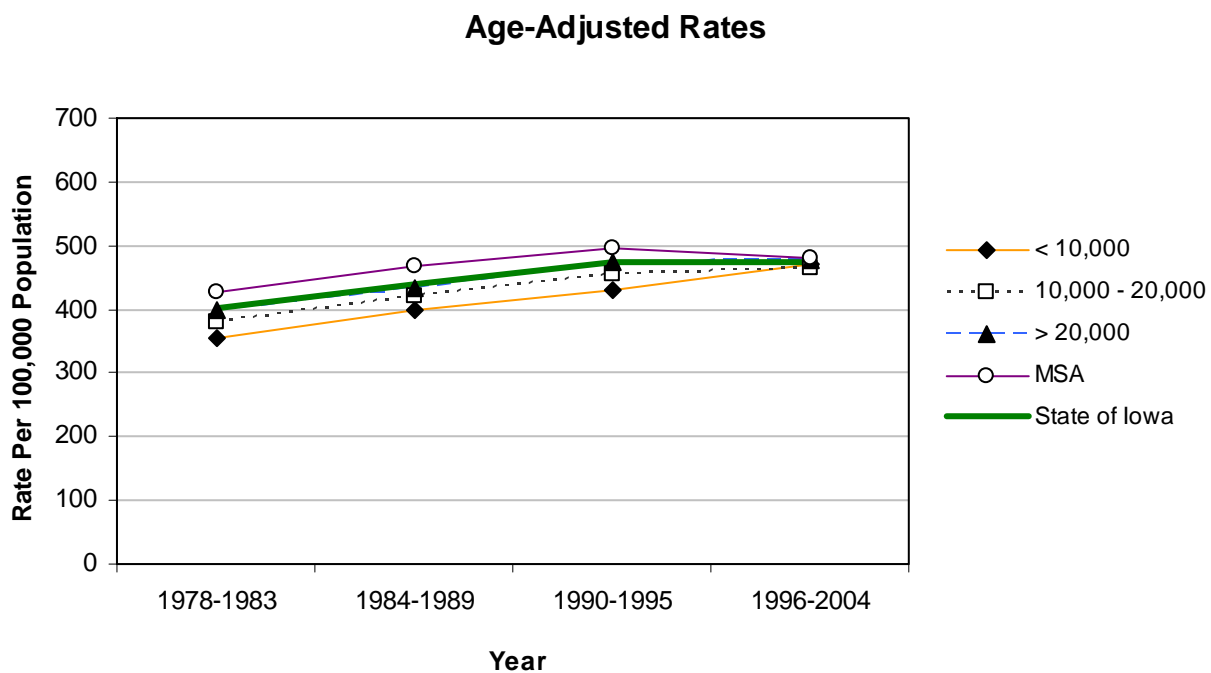
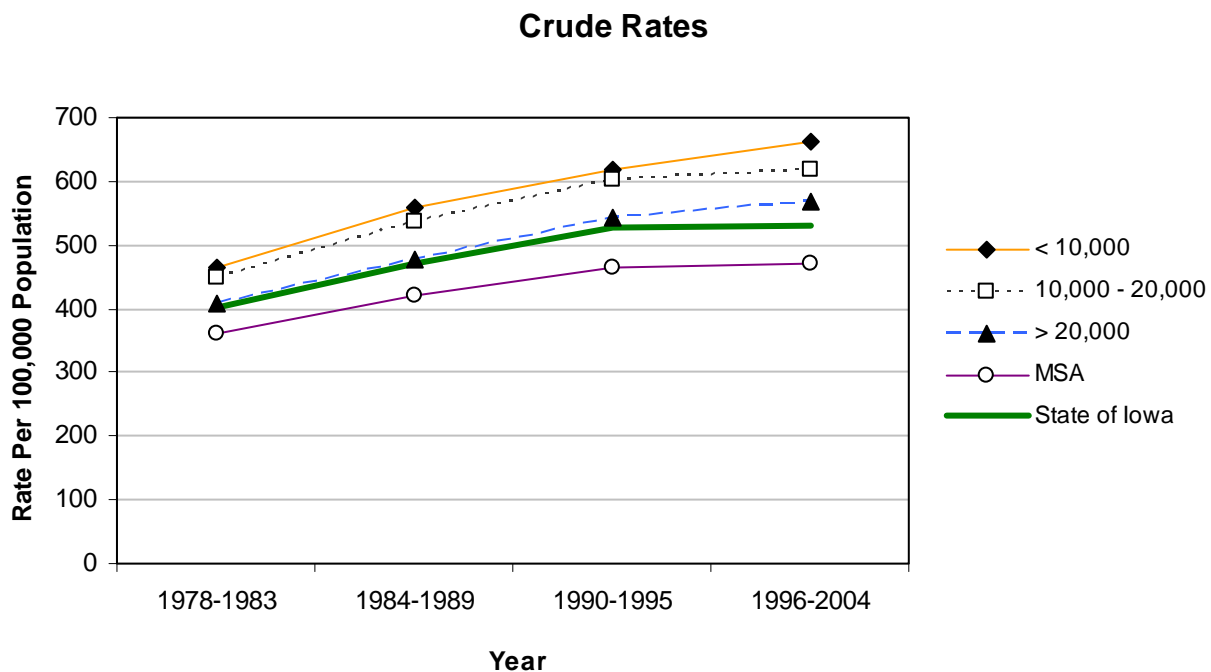
All Cancer Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	458	623.5 (35)	424.5 (96)	Monona	677	757.5 (02)	477.6 (40)
	Adams	247	617.7 (38)	427.9 (94)	Monroe	479	666.8 (18)	494.6 (16)
	Audubon	459	756.5 (03)	478.4 (38)	Osceola	396	630.4 (30)	473.0 (52)
	Clarke	464	572.0 (63)	464.0 (62)	Palo Alto	677	748.5 (04)	523.2 (02)
	Davis	455	591.0 (57)	471.2 (54)	Pocahontas	567	733.1 (07)	475.1 (44)
	Decatur	425	549.9 (72)	443.9 (82)	Ringgold	362	743.5 (05)	469.6 (58)
	Fremont	470	658.3 (23)	480.4 (35)	Taylor	377	606.9 (49)	408.9 (98)
	Howard	559	626.9 (33)	459.7 (65)	Van Buren	446	638.9 (28)	470.2 (57)
	Ida	487	695.7 (10)	476.0 (43)	Wayne	515	848.6 (01)	537.0 (01)
	Lucas	545	640.9 (26)	473.7 (49)	Worth	418	590.7 (58)	433.5 (89)
					Total	9,483	663.6	469.3
Counties with Average Population 10,000 – 20,000	Allamakee	786	599.6 (53)	452.5 (76)	Hardin	1,154	686.6 (13)	487.8 (26)
	Appanoose	811	659.8 (20)	472.6 (53)	Humboldt	612	659.6 (22)	458.6 (66)
	Butler	870	633.9 (29)	451.0 (78)	Iowa	800	567.0 (65)	461.5 (64)
	Calhoun	702	706.3 (09)	469.1 (59)	Jefferson	686	469.2 (93)	417.9 (97)
	Cass	868	659.7 (21)	453.9 (74)	Keokuk	631	615.9 (42)	457.0 (68)
	Cedar	998	611.4 (46)	507.5 (04)	Kossuth	964	629.6 (31)	456.2 (70)
	Cherokee	811	694.9 (11)	489.3 (21)	Louisa	505	462.1 (94)	425.6 (95)
	Chickasaw	655	558.3 (70)	441.3 (84)	Lyon	646	610.2 (47)	479.1 (37)
	Clay	997	639.7 (27)	505.6 (07)	Mitchell	602	614.6 (43)	429.1 (92)
	Clayton	1,034	616.0 (41)	474.3 (46)	Montgomery	689	657.6 (24)	473.3 (51)
	Crawford	862	566.6 (66)	458.1 (67)	O'Brien	939	693.3 (12)	483.1 (33)
	Delaware	804	487.7 (91)	432.8 (90)	Page	1,033	679.3 (15)	491.3 (18)
	Dickinson	1,047	713.2 (08)	496.4 (15)	Poweshiek	946	556.0 (71)	447.9 (81)
	Emmet	621	626.8 (34)	475.1 (44)	Sac	760	738.0 (06)	488.5 (25)
	Floyd	909	600.9 (52)	440.2 (86)	Shelby	726	616.8 (39)	442.2 (83)
	Franklin	584	601.9 (51)	438.8 (88)	Tama	1,069	660.7 (19)	501.7 (09)
	Greene	632	684.4 (14)	470.4 (56)	Union	660	599.2 (54)	448.0 (80)
	Hamilton	852	579.4 (62)	453.8 (75)	Winnebago	525	501.4 (85)	381.9 (99)
	Hancock	662	613.4 (44)	480.0 (36)	Wright	864	674.9 (17)	473.7 (49)
					Total	30,316	617.9	463.5
Counties with Average Population > 20,000	Boone	1,271	540.5 (75)	454.1 (73)	Lee	2,029	596.4 (55)	484.0 (31)
	Buchanan	1,068	564.3 (69)	510.8 (03)	Mahaska	1,067	533.4 (79)	452.1 (77)
	Buena Vista	1,113	608.1 (48)	506.8 (05)	Marion	1,433	496.6 (88)	430.7 (91)
	Carroll	1,186	616.3 (40)	480.7 (34)	Marshall	2,143	606.3 (50)	496.6 (13)
	Cerro Gordo	2,415	581.5 (61)	465.2 (61)	Muscatine	1,890	502.9 (84)	488.9 (23)
	Clinton	2,632	582.6 (60)	491.4 (17)	Plymouth	1,268	568.8 (64)	490.2 (19)
	Des Moines	2,354	622.2 (36)	506.8 (05)	Sioux	1,468	514.3 (83)	476.2 (42)
	Fayette	1,205	612.6 (45)	455.1 (71)	Wapello	2,009	620.8 (37)	496.6 (13)
	Henry	967	531.8 (80)	473.9 (48)	Webster	2,119	592.7 (56)	484.6 (29)
	Jackson	1,076	590.6 (59)	477.7 (39)	Winneshiek	953	498.8 (86)	441.3 (84)
	Jasper	1,806	541.5 (74)	454.5 (72)	Total	33,472	569.4	478.2
MSA Counties	Benton	1,224	534.4 (77)	477.1 (41)	Linn	8,348	485.4 (92)	490.2 (19)
	Black Hawk	5,891	515.1 (82)	486.3 (27)	Madison	680	536.1 (76)	470.8 (55)
	Bremer	1,142	543.2 (73)	456.3 (69)	Mills	649	497.5 (87)	474.1 (47)
	Dallas	1,709	456.7 (95)	497.9 (12)	Polk	14,632	433.0 (96)	467.4 (60)
	Dubuque	4,302	534.3 (78)	485.2 (28)	Pottawattamie	4,076	518.6 (81)	489.0 (22)
	Grundy	752	677.6 (16)	499.9 (10)	Scott	7,009	491.3 (90)	504.6 (08)
	Guthrie	660	645.2 (25)	463.6 (63)	Story	2,485	348.4 (98)	439.0 (87)
	Harrison	883	628.6 (32)	498.0 (11)	Warren	1,544	420.9 (97)	428.5 (93)
	Johnson	3,365	337.0 (99)	484.0 (31)	Washington	1,059	565.1 (68)	448.9 (79)
	Jones	1,038	566.2 (67)	488.9 (23)	Woodbury	4,607	494.1 (89)	484.1 (30)
					Total	66,055	469.6	479.6
	State Total	139,326	530.2	475.4				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

All Cancer Incidence by County Group 1978-2004



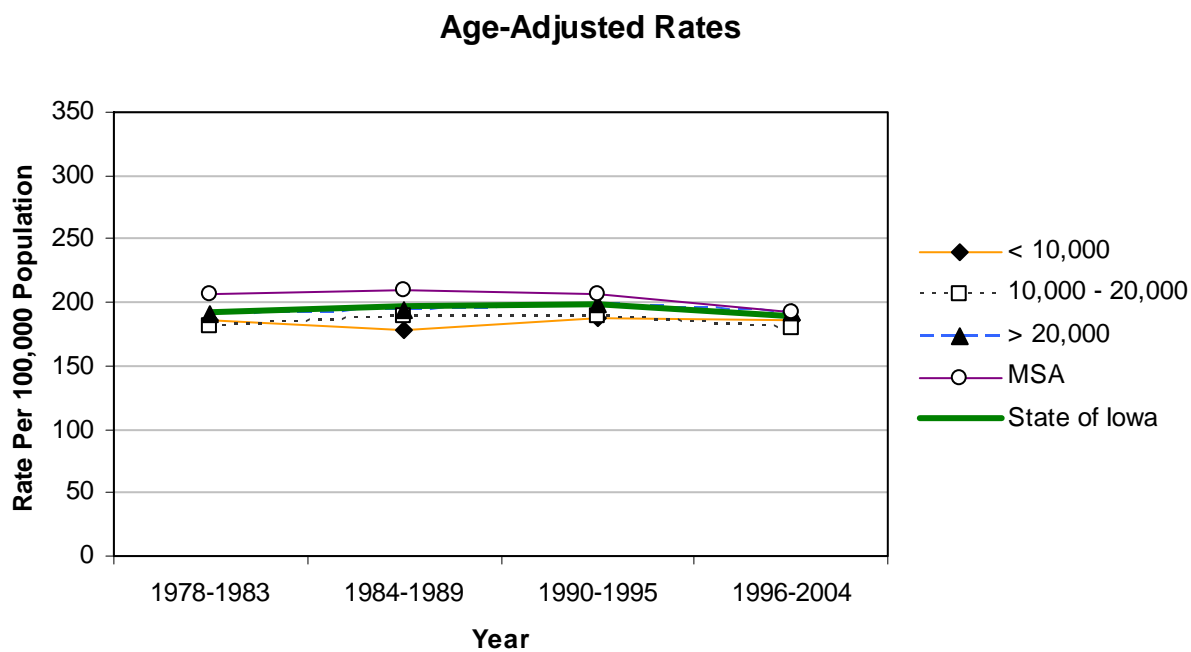
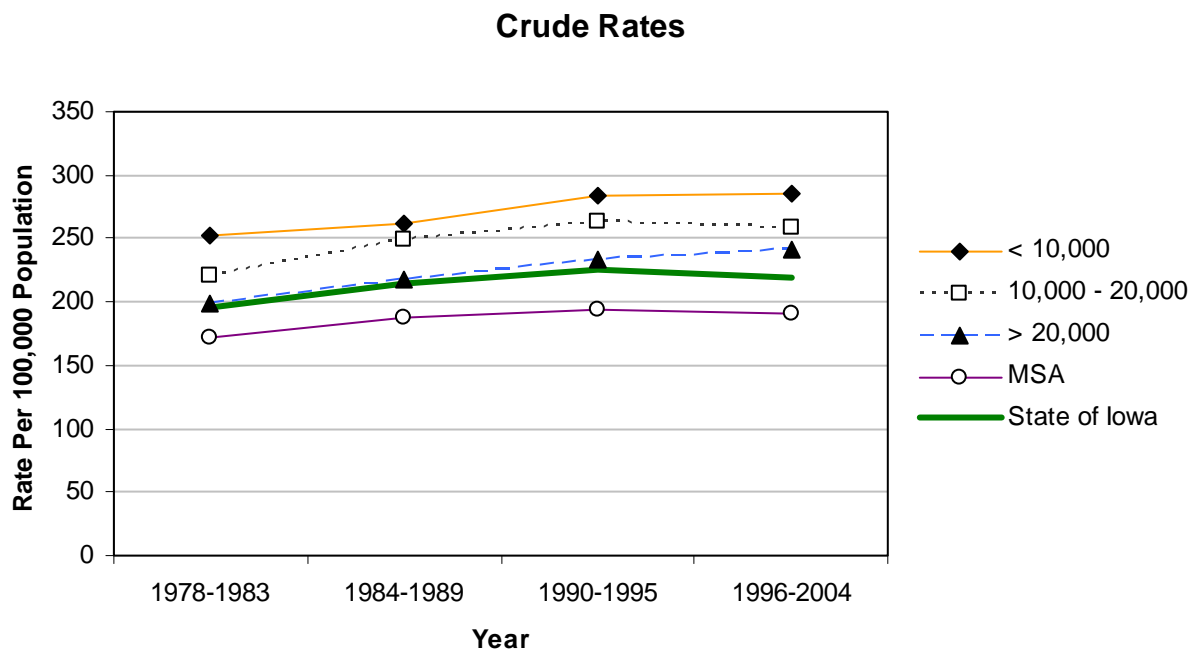
All Cancer Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	221	300.9 (11)	181.9 (59)	Monona	331	370.3 (01)	210.6 (06)
	Adams	112	280.1 (18)	180.7 (64)	Monroe	208	289.6 (16)	205.2 (08)
	Audubon	177	291.7 (14)	169.3 (84)	Osceola	145	230.8 (66)	169.0 (85)
	Clarke	183	225.6 (72)	171.4 (81)	Palo Alto	311	343.8 (03)	221.3 (01)
	Davis	178	231.2 (64)	172.1 (79)	Pocahontas	246	318.1 (05)	196.1 (23)
	Decatur	194	251.0 (53)	188.7 (37)	Ringgold	158	324.5 (04)	175.4 (73)
	Fremont	226	316.6 (06)	215.5 (03)	Taylor	159	255.9 (46)	156.5 (98)
	Howard	248	278.1 (22)	183.7 (50)	Van Buren	180	257.9 (43)	177.2 (68)
	Ida	184	262.9 (40)	167.4 (87)	Wayne	213	351.0 (02)	204.1 (09)
	Lucas	211	248.1 (56)	171.6 (80)	Worth	193	272.7 (27)	183.6 (51)
					Total	4,078	285.4	186.3
Counties with Average Population 10,000 – 20,000	Allamakee	311	237.3 (59)	165.5 (91)	Hardin	524	311.8 (08)	200.4 (13)
	Appanoose	331	269.3 (31)	183.8 (49)	Humboldt	254	273.8 (25)	175.8 (72)
	Butler	400	291.4 (15)	191.0 (30)	Iowa	342	242.4 (58)	181.9 (59)
	Calhoun	310	311.9 (07)	188.4 (38)	Jefferson	280	191.5 (92)	166.6 (88)
	Cass	349	265.3 (37)	165.4 (92)	Keokuk	272	265.5 (36)	183.4 (52)
	Cedar	417	255.4 (48)	196.9 (21)	Kossuth	401	261.9 (41)	174.9 (74)
	Cherokee	322	275.9 (23)	181.1 (61)	Louisa	243	222.3 (74)	197.9 (18)
	Chickasaw	271	231.0 (65)	169.5 (82)	Lyon	233	220.1 (76)	161.1 (96)
	Clay	339	217.5 (81)	161.5 (95)	Mitchell	261	266.5 (35)	166.5 (89)
	Clayton	428	255.0 (49)	182.8 (55)	Montgomery	282	269.2 (32)	182.2 (57)
	Crawford	349	229.4 (69)	173.2 (76)	O'Brien	378	279.1 (20)	180.5 (65)
	Delaware	339	205.6 (88)	176.3 (71)	Page	433	284.7 (17)	188.2 (40)
	Dickinson	410	279.3 (19)	183.1 (53)	Poweshiek	425	249.8 (54)	185.9 (43)
	Emmet	255	257.4 (44)	176.8 (69)	Sac	310	301.0 (10)	184.3 (48)
	Floyd	410	271.0 (28)	182.5 (56)	Shelby	302	256.6 (45)	172.9 (77)
	Franklin	242	249.4 (55)	162.6 (94)	Tama	409	252.8 (52)	179.2 (66)
	Greene	275	297.8 (12)	185.9 (43)	Union	297	269.6 (30)	188.4 (38)
	Hamilton	388	263.8 (39)	194.1 (26)	Winnebago	247	235.9 (60)	164.4 (93)
	Hancock	253	234.4 (62)	168.6 (86)	Wright	395	308.5 (09)	191.7 (28)
					Total	12,687	258.6	179.7
Counties with Average Population > 20,000	Boone	553	235.2 (61)	186.8 (42)	Lee	932	273.9 (24)	214.4 (05)
	Buchanan	435	229.9 (68)	200.2 (14)	Mahaska	461	230.5 (67)	187.2 (41)
	Buena Vista	429	234.4 (62)	182.9 (54)	Marion	632	219.0 (79)	180.9 (62)
	Carroll	509	264.5 (38)	190.0 (31)	Marshall	967	273.6 (26)	214.6 (04)
	Cerro Gordo	1,058	254.8 (50)	192.1 (27)	Muscatine	783	208.3 (87)	199.9 (16)
	Clinton	1,096	242.6 (57)	198.3 (17)	Plymouth	508	227.9 (71)	185.3 (46)
	Des Moines	977	258.2 (42)	201.9 (11)	Sioux	498	174.5 (96)	151.8 (99)
	Fayette	549	279.1 (20)	196.5 (22)	Wapello	865	267.3 (34)	203.9 (10)
	Henry	398	218.9 (80)	185.8 (45)	Webster	915	255.9 (46)	197.1 (20)
	Jackson	463	254.1 (51)	194.8 (25)	Winneshiek	406	212.5 (83)	173.6 (75)
	Jasper	739	221.6 (75)	180.8 (63)	Total	14,173	241.1	193.1
MSA Counties	Benton	484	211.3 (85)	178.8 (67)	Linn	3,250	189.0 (93)	190.0 (31)
	Black Hawk	2,389	208.9 (86)	191.5 (29)	Madison	279	220.0 (77)	185.0 (47)
	Bremer	446	212.1 (84)	166.2 (90)	Mills	257	197.0 (90)	189.3 (35)
	Dallas	674	180.1 (95)	197.9 (18)	Polk	6,180	182.9 (94)	200.0 (15)
	Dubuque	1,742	216.3 (82)	189.1 (36)	Pottawattamie	1,766	224.7 (73)	210.6 (06)
	Grundy	298	268.5 (33)	182.2 (57)	Scott	2,774	194.5 (91)	201.7 (12)
	Guthrie	277	270.8 (29)	176.4 (70)	Story	984	138.0 (98)	169.5 (82)
	Harrison	413	294.0 (13)	219.1 (02)	Warren	618	168.5 (97)	172.7 (78)
	Johnson	1,226	122.8 (99)	189.8 (33)	Washington	411	219.3 (78)	158.5 (97)
	Jones	419	228.5 (70)	189.4 (34)	Woodbury	1,910	204.9 (89)	195.3 (24)
					Total	26,797	190.5	192.8
	State Total	57,735	219.7	189.2				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

All Cancer Mortality by County Group 1978-2004



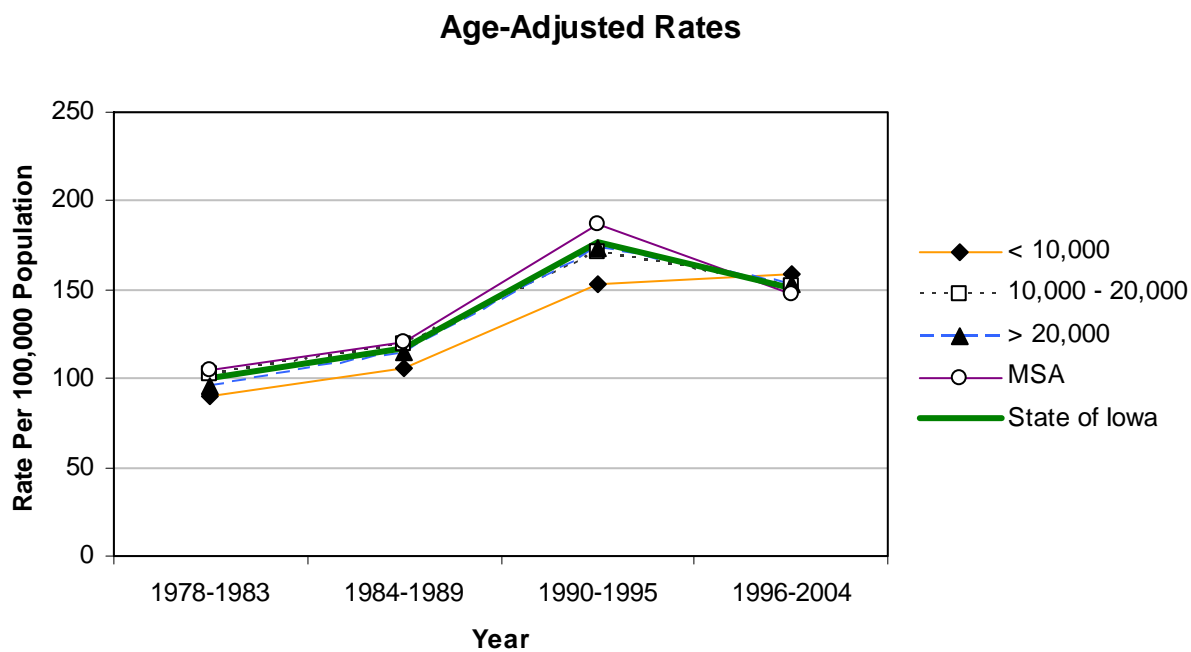
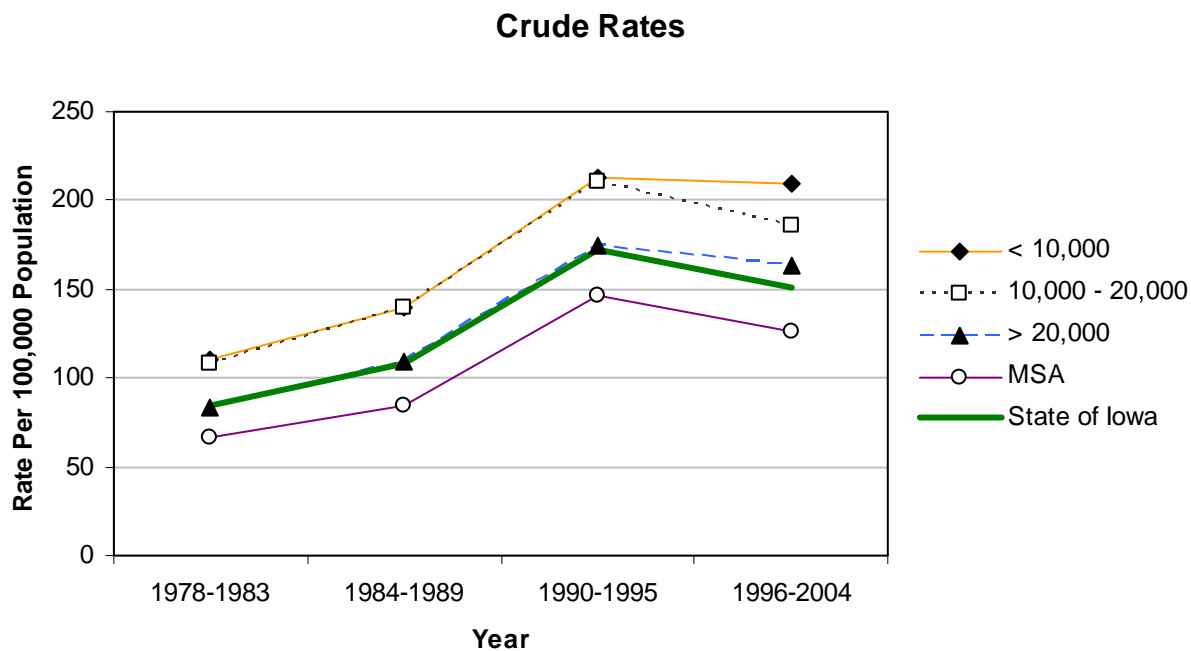
Prostate Cancer Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	81	225.4 (13)	161.5 (36)	Monona	97	224.1 (14)	154.8 (44)
	Adams	32	162.4 (60)	115.4 (92)	Monroe	68	193.9 (31)	157.1 (42)
	Audubon	90	308.6 (02)	206.7 (05)	Osceola	50	163.0 (58)	136.0 (78)
	Clarke	74	186.3 (40)	164.3 (31)	Palo Alto	123	278.2 (04)	214.9 (02)
	Davis	70	183.7 (41)	161.3 (37)	Pocahontas	102	269.2 (06)	196.1 (07)
	Decatur	49	129.8 (89)	110.8 (95)	Ringgold	65	275.8 (05)	177.3 (13)
	Fremont	48	137.7 (83)	108.6 (96)	Taylor	44	146.6 (77)	100.7 (99)
	Howard	80	181.9 (42)	142.4 (66)	Van Buren	79	227.5 (12)	173.2 (17)
	Ida	70	205.7 (24)	150.3 (51)	Wayne	91	314.5 (01)	202.0 (06)
	Lucas	88	213.6 (19)	169.2 (20)	Worth	61	174.2 (51)	141.5 (68)
					Total	1,462	209.5	159.0
Counties with Average Population 10,000 – 20,000	Allamakee	128	195.2 (29)	158.6 (38)	Hardin	176	213.8 (18)	166.9 (27)
	Appanoose	120	203.7 (25)	154.7 (45)	Humboldt	86	189.4 (37)	144.6 (57)
	Butler	134	198.4 (26)	153.4 (49)	Iowa	108	157.0 (67)	138.2 (74)
	Calhoun	96	193.9 (31)	143.1 (65)	Jefferson	98	136.9 (84)	143.5 (63)
	Cass	123	192.7 (33)	145.5 (55)	Keokuk	79	158.9 (64)	128.9 (85)
	Cedar	133	165.1 (55)	148.6 (54)	Kossuth	155	206.7 (23)	155.3 (43)
	Cherokee	127	221.2 (15)	168.3 (23)	Louisa	56	103.0 (96)	104.4 (98)
	Chickasaw	96	163.8 (57)	137.9 (75)	Lyon	113	215.5 (17)	186.1 (10)
	Clay	166	220.3 (16)	192.4 (08)	Mitchell	76	158.7 (65)	114.3 (94)
	Clayton	148	178.2 (45)	144.5 (58)	Montgomery	74	149.0 (73)	117.4 (91)
	Crawford	145	190.6 (35)	167.3 (25)	O'Brien	151	228.2 (11)	179.4 (12)
	Delaware	119	145.7 (78)	137.3 (77)	Page	153	198.0 (27)	167.0 (26)
	Dickinson	207	289.1 (03)	209.2 (04)	Poweshiek	99	120.9 (92)	105.7 (97)
	Emmet	119	246.5 (07)	210.2 (03)	Sac	117	232.0 (10)	163.3 (34)
	Floyd	121	165.7 (54)	129.6 (84)	Shelby	112	194.3 (30)	143.9 (61)
	Franklin	74	155.2 (69)	120.3 (90)	Tama	185	233.0 (09)	190.4 (09)
	Greene	94	208.9 (20)	158.2 (39)	Union	80	151.8 (71)	125.1 (88)
	Hamilton	112	154.0 (70)	130.7 (82)	Winnebago	76	148.9 (74)	126.6 (86)
	Hancock	110	207.3 (22)	172.7 (18)	Wright	110	175.5 (49)	134.4 (80)
					Total	4,476	186.0	151.9
Counties with Average Population > 20,000	Boone	167	145.4 (80)	135.7 (79)	Lee	295	175.4 (50)	163.0 (35)
	Buchanan	152	161.8 (61)	164.1 (33)	Mahaska	157	157.9 (66)	149.1 (53)
	Buena Vista	214	233.7 (08)	222.2 (01)	Marion	199	139.0 (82)	130.4 (83)
	Carroll	179	191.2 (34)	168.4 (22)	Marshall	345	197.3 (28)	174.8 (14)
	Cerro Gordo	324	162.5 (59)	143.4 (64)	Muscatine	232	124.6 (91)	138.6 (72)
	Clinton	325	148.2 (76)	138.7 (71)	Plymouth	198	178.7 (44)	168.3 (23)
	Des Moines	323	176.9 (48)	166.1 (28)	Sioux	253	180.6 (43)	185.3 (11)
	Fayette	161	166.0 (53)	138.4 (73)	Wapello	236	150.0 (72)	131.6 (81)
	Henry	137	148.4 (75)	157.8 (40)	Webster	302	169.7 (52)	157.4 (41)
	Jackson	144	160.4 (62)	139.7 (70)	Winneshiek	167	177.4 (46)	170.8 (19)
	Jasper	226	134.9 (85)	126.1 (87)	Total	4,736	163.6	153.3
MSA Counties	Benton	166	145.5 (79)	144.2 (59)	Linn	1,080	128.2 (90)	144.2 (59)
	Black Hawk	860	156.7 (68)	164.9 (29)	Madison	111	177.2 (47)	174.5 (15)
	Bremer	193	189.8 (36)	174.4 (16)	Mills	88	134.5 (86)	145.2 (56)
	Dallas	218	118.1 (93)	154.2 (46)	Polk	1,786	109.0 (95)	137.8 (76)
	Dubuque	644	164.4 (56)	164.9 (29)	Pottawattamie	442	115.2 (94)	120.9 (89)
	Grundy	113	208.5 (21)	168.5 (21)	Scott	911	130.5 (88)	153.9 (48)
	Guthrie	94	186.6 (39)	139.8 (69)	Story	354	96.8 (98)	149.8 (52)
	Harrison	129	187.0 (38)	164.2 (32)	Warren	182	101.9 (97)	115.2 (93)
	Johnson	447	90.2 (99)	152.8 (50)	Washington	145	160.2 (63)	143.7 (62)
	Jones	137	142.3 (81)	142.1 (67)	Woodbury	611	133.9 (87)	154.0 (47)
					Total	8,711	126.5	148.0
	State Total	19,385	150.4	151.4				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Prostate Cancer Incidence by County Group 1978-2004



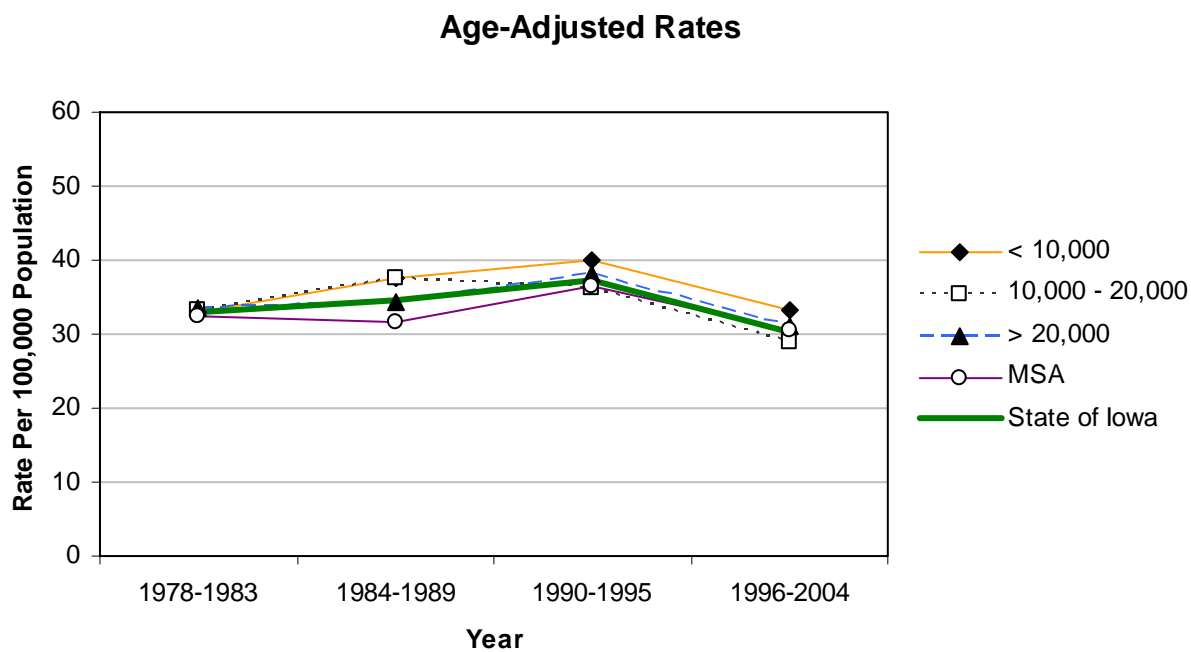
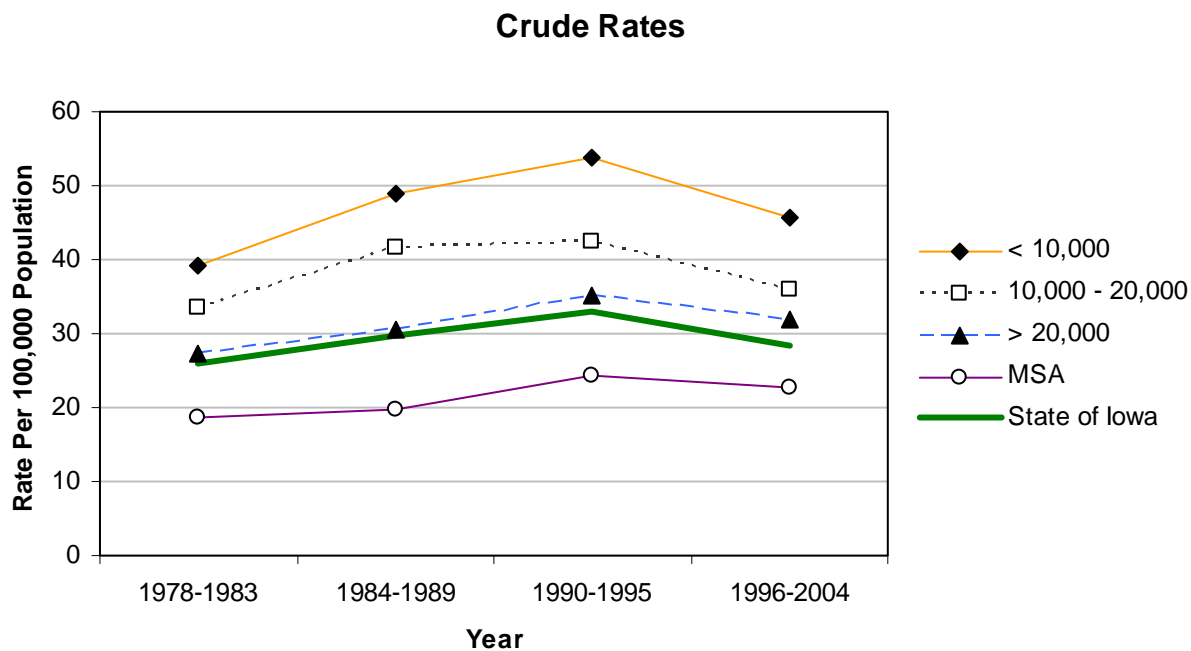
Prostate Cancer Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	22	61.2 (04)	39.2 (11)	Monona	29	67.0 (03)	42.5 (06)
	Adams	6	30.4 (66)	22.0 (89)	Monroe	7	20.0 (94)	16.1 (97)
	Audubon	17	58.3 (06)	38.3 (16)	Osceola	7	22.8 (87)	19.0 (94)
	Clarke	15	37.8 (37)	32.4 (34)	Palo Alto	33	74.6 (01)	55.2 (01)
	Davis	11	28.9 (69)	26.0 (77)	Pocahontas	15	39.6 (31)	27.2 (71)
	Decatur	13	34.4 (49)	30.3 (52)	Ringgold	12	50.9 (10)	31.1 (41)
	Fremont	16	45.9 (18)	35.4 (20)	Taylor	11	36.7 (42)	22.4 (87)
	Howard	22	50.0 (12)	36.3 (18)	Van Buren	15	43.2 (23)	30.9 (47)
	Ida	20	58.8 (05)	41.0 (07)	Wayne	20	69.1 (02)	40.2 (10)
	Lucas	16	38.8 (33)	31.7 (37)	Worth	11	31.4 (60)	25.3 (83)
					Total	318	45.6	33.2
Counties with Average Population 10,000 – 20,000	Allamakee	22	33.5 (54)	29.4 (59)	Hardin	37	45.0 (20)	33.4 (28)
	Appanoose	24	40.7 (29)	30.3 (52)	Humboldt	14	30.8 (64)	23.1 (85)
	Butler	28	41.5 (27)	31.1 (41)	Iowa	24	34.9 (46)	30.6 (49)
	Calhoun	22	44.4 (21)	30.3 (52)	Jefferson	13	18.2 (97)	18.6 (95)
	Cass	22	34.5 (48)	25.5 (80)	Keokuk	19	38.2 (36)	28.9 (62)
	Cedar	30	37.2 (41)	33.7 (27)	Kossuth	22	29.3 (67)	21.6 (91)
	Cherokee	26	45.3 (19)	35.4 (20)	Louisa	9	16.6 (98)	17.6 (96)
	Chickasaw	21	35.8 (44)	29.6 (58)	Lyon	10	19.1 (95)	15.6 (98)
	Clay	21	27.9 (71)	24.8 (84)	Mitchell	23	48.0 (17)	30.4 (50)
	Clayton	28	33.7 (53)	28.0 (67)	Montgomery	10	20.1 (93)	15.4 (99)
	Crawford	27	35.5 (45)	33.0 (30)	O'Brien	25	37.8 (37)	28.5 (65)
	Delaware	21	25.7 (77)	26.0 (77)	Page	38	49.2 (14)	40.8 (08)
	Dickinson	21	29.3 (67)	21.6 (91)	Poweshiek	28	34.2 (50)	29.0 (61)
	Emmet	26	53.9 (09)	43.6 (04)	Sac	28	55.5 (08)	37.7 (17)
	Floyd	30	41.1 (28)	31.1 (41)	Shelby	28	48.6 (16)	34.4 (22)
	Franklin	21	44.0 (22)	34.0 (25)	Tama	27	34.0 (52)	27.6 (70)
	Greene	14	31.1 (62)	22.3 (88)	Union	21	39.9 (30)	34.2 (24)
	Hamilton	19	26.1 (76)	22.7 (86)	Winnebago	22	43.1 (24)	33.2 (29)
	Hancock	20	37.7 (39)	31.1 (41)	Wright	24	38.3 (34)	27.0 (75)
					Total	865	36.0	28.8
Counties with Average Population > 20,000	Boone	32	27.9 (71)	28.1 (66)	Lee	46	27.3 (74)	27.8 (69)
	Buchanan	26	27.7 (73)	31.1 (41)	Mahaska	33	33.2 (55)	30.4 (50)
	Buena Vista	36	39.3 (32)	35.9 (19)	Marion	46	32.1 (59)	30.1 (57)
	Carroll	32	34.2 (50)	29.1 (60)	Marshall	86	49.2 (14)	46.1 (02)
	Cerro Gordo	56	28.1 (70)	25.8 (79)	Muscatine	45	24.2 (81)	32.2 (36)
	Clinton	55	25.1 (78)	25.5 (80)	Plymouth	36	32.5 (57)	30.3 (52)
	Des Moines	60	32.9 (56)	32.6 (32)	Sioux	43	30.7 (65)	31.6 (38)
	Fayette	30	30.9 (63)	25.5 (80)	Wapello	57	36.2 (43)	32.5 (33)
	Henry	29	31.4 (60)	34.3 (23)	Webster	62	34.8 (47)	33.9 (26)
	Jackson	38	42.3 (26)	39.1 (12)	Winneshiek	40	42.5 (25)	40.7 (09)
	Jasper	34	20.3 (91)	20.1 (93)	Total	922	31.9	31.2
MSA Counties	Benton	25	21.9 (88)	22.0 (89)	Linn	177	21.0 (90)	28.7 (64)
	Black Hawk	135	24.6 (79)	28.0 (67)	Madison	24	38.3 (34)	38.8 (15)
	Bremer	33	32.5 (57)	31.3 (40)	Mills	16	24.4 (80)	31.4 (39)
	Dallas	34	18.4 (96)	27.2 (71)	Polk	346	21.1 (89)	32.3 (35)
	Dubuque	92	23.5 (84)	27.1 (73)	Pottawattamie	88	22.9 (86)	27.1 (73)
	Grundy	27	49.8 (13)	38.9 (14)	Scott	141	20.2 (92)	28.9 (62)
	Guthrie	29	57.6 (07)	43.5 (05)	Story	86	23.5 (84)	39.1 (12)
	Harrison	35	50.7 (11)	45.4 (03)	Warren	43	24.1 (82)	32.9 (31)
	Johnson	59	11.9 (99)	26.1 (76)	Washington	34	37.6 (40)	31.1 (41)
	Jones	26	27.0 (75)	30.8 (48)	Woodbury	109	23.9 (83)	30.2 (56)
					Total	1,559	22.6	30.5
	State Total	3,664	28.4	30.4				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Prostate Cancer Mortality by County Group 1978-2004



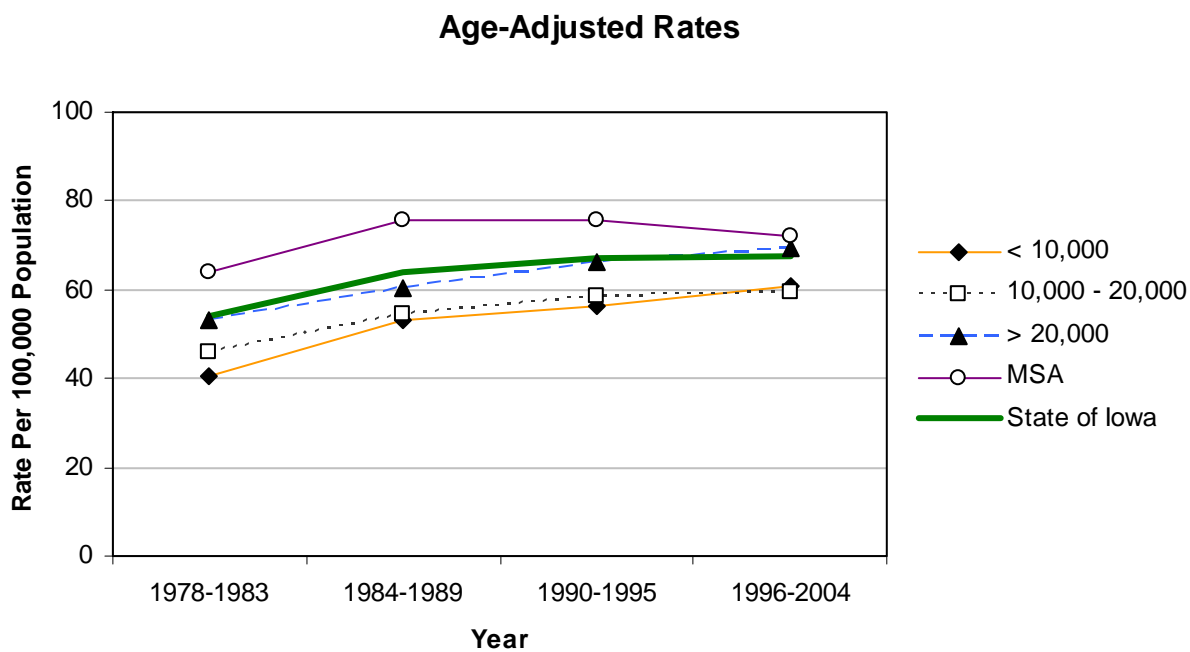
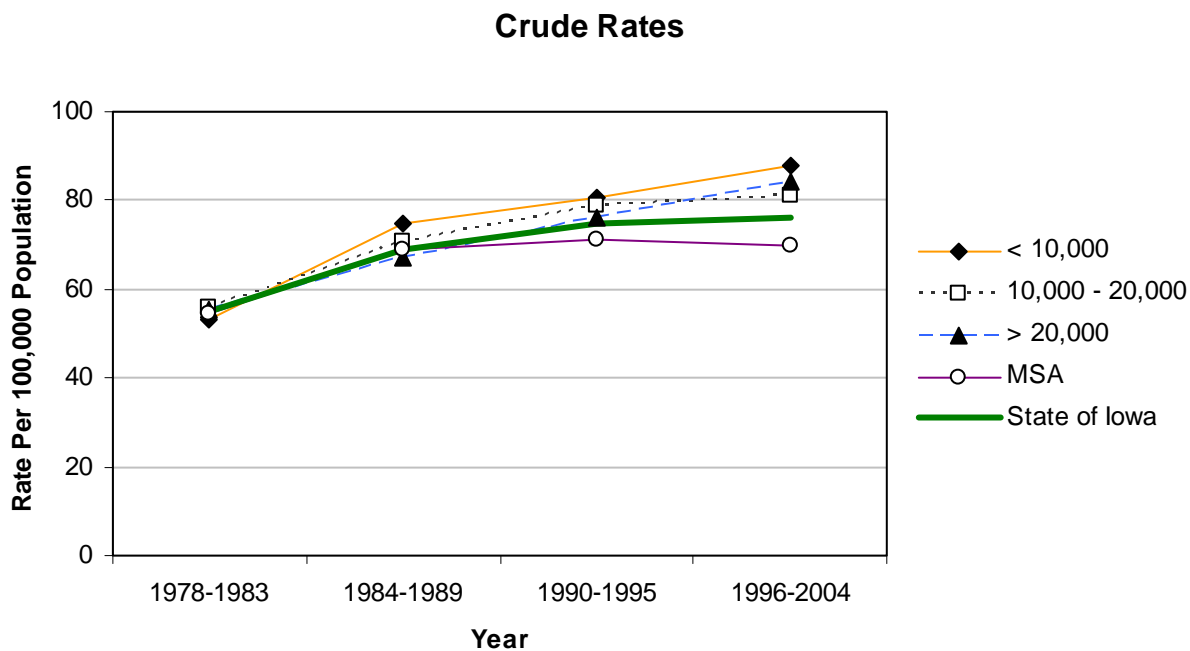
Lung Cancer Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	69	93.9 (23)	64.6 (43)	Monona	107	74.1 (68)	55.0 (76)
	Adams	42	105.0 (07)	69.6 (32)	Monroe	78	119.7 (01)	72.4 (20)
	Audubon	47	77.5 (57)	50.6 (90)	Osceola	40	108.6 (03)	80.2 (06)
	Clarke	58	71.5 (72)	55.2 (75)	Palo Alto	98	63.7 (86)	48.3 (92)
	Davis	55	71.4 (73)	54.1 (78)	Pocahontas	75	108.4 (04)	70.8 (29)
	Decatur	54	69.9 (77)	55.3 (74)	Ringgold	42	97.0 (16)	62.0 (52)
	Fremont	75	105.1 (06)	74.4 (15)	Taylor	52	86.3 (34)	51.7 (84)
	Howard	58	65.0 (83)	44.3 (96)	Van Buren	60	83.7 (44)	57.8 (66)
	Ida	53	75.7 (60)	50.9 (88)	Wayne	71	86.0 (36)	60.9 (56)
	Lucas	63	74.1 (68)	55.0 (76)	Worth	61	117.0 (02)	73.4 (18)
					Total	1,258	88.0	60.8
Counties with Average Population 10,000 – 20,000	Allamakee	93	71.0 (74)	50.8 (89)	Hardin	137	81.5 (50)	56.6 (71)
	Appanoose	105	85.4 (41)	60.0 (59)	Humboldt	94	101.3 (12)	67.0 (37)
	Butler	102	74.3 (66)	51.1 (86)	Iowa	101	71.6 (71)	58.0 (65)
	Calhoun	91	91.6 (28)	57.8 (66)	Jefferson	92	62.9 (91)	56.1 (72)
	Cass	110	83.6 (45)	57.6 (68)	Keokuk	96	93.7 (24)	71.0 (28)
	Cedar	131	80.2 (53)	66.0 (41)	Kossuth	131	85.6 (39)	58.9 (64)
	Cherokee	110	94.3 (20)	64.0 (46)	Louisa	72	65.9 (82)	60.8 (57)
	Chickasaw	107	91.2 (29)	70.7 (30)	Lyon	57	53.8 (95)	39.8 (98)
	Clay	121	77.6 (56)	60.2 (58)	Mitchell	81	82.7 (47)	55.4 (73)
	Clayton	133	79.2 (55)	59.7 (62)	Montgomery	107	102.1 (11)	74.6 (14)
	Crawford	102	67.0 (80)	52.4 (80)	O'Brien	112	82.7 (47)	56.7 (70)
	Delaware	104	63.1 (90)	54.2 (77)	Page	158	103.9 (09)	75.1 (12)
	Dickinson	143	97.4 (15)	63.8 (47)	Poweshiek	116	68.2 (79)	53.7 (79)
	Emmet	94	94.9 (18)	68.7 (34)	Sac	98	95.2 (17)	64.1 (45)
	Floyd	127	84.0 (43)	59.8 (61)	Shelby	78	66.3 (81)	46.6 (94)
	Franklin	73	75.2 (61)	51.7 (84)	Tama	133	82.2 (49)	62.0 (52)
	Greene	79	85.5 (40)	59.5 (63)	Union	109	99.0 (14)	74.1 (16)
	Hamilton	130	88.4 (31)	66.8 (39)	Winnebago	61	58.3 (94)	45.5 (95)
	Hancock	79	73.2 (69)	57.3 (69)	Wright	118	92.2 (25)	63.2 (49)
					Total	3,985	81.2	59.6
Counties with Average Population > 20,000	Boone	202	85.9 (37)	71.6 (24)	Lee	367	107.9 (05)	86.4 (01)
	Buchanan	150	79.3 (54)	72.2 (22)	Mahaska	189	94.5 (19)	80.3 (05)
	Buena Vista	117	63.9 (85)	52.2 (82)	Marion	205	71.0 (74)	61.8 (54)
	Carroll	165	85.7 (38)	66.1 (40)	Marshall	325	92.0 (26)	73.6 (17)
	Cerro Gordo	391	94.2 (22)	72.4 (20)	Muscatine	279	74.2 (67)	72.2 (22)
	Clinton	398	88.1 (32)	72.9 (19)	Plymouth	138	61.9 (92)	52.4 (80)
	Des Moines	389	102.8 (10)	82.9 (03)	Sioux	109	38.2 (99)	34.2 (99)
	Fayette	163	82.9 (46)	59.9 (60)	Wapello	339	104.7 (08)	81.5 (04)
	Henry	136	74.8 (63)	67.1 (36)	Webster	337	94.3 (20)	76.0 (11)
	Jackson	155	85.1 (42)	67.0 (37)	Winneshiek	97	50.8 (96)	43.4 (97)
	Jasper	290	87.0 (33)	71.2 (27)	Total	4,941	84.1	69.5
MSA Counties	Benton	166	72.5 (70)	64.4 (44)	Linn	1,315	76.5 (59)	77.8 (08)
	Black Hawk	852	74.5 (64)	70.0 (31)	Madison	95	74.9 (62)	67.3 (35)
	Bremer	133	63.3 (87)	51.0 (87)	Mills	84	64.4 (84)	62.2 (51)
	Dallas	237	63.3 (87)	71.3 (26)	Polk	2,347	69.5 (78)	76.6 (10)
	Dubuque	647	80.3 (52)	71.5 (25)	Pottawattamie	706	89.8 (30)	83.7 (02)
	Grundy	78	70.3 (76)	50.4 (91)	Scott	1,061	74.4 (65)	77.0 (09)
	Guthrie	94	91.9 (27)	63.5 (48)	Story	283	39.7 (97)	51.8 (83)
	Harrison	140	99.7 (13)	78.1 (07)	Warren	232	63.2 (89)	65.0 (42)
	Johnson	394	39.5 (98)	61.4 (55)	Washington	115	61.4 (93)	47.5 (93)
	Jones	149	81.3 (51)	69.1 (33)	Woodbury	717	76.9 (58)	75.1 (12)
					Total	9,845	70.0	72.0
	State Total	20,029	76.2	67.7				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Lung Cancer Incidence by County Group 1978-2004



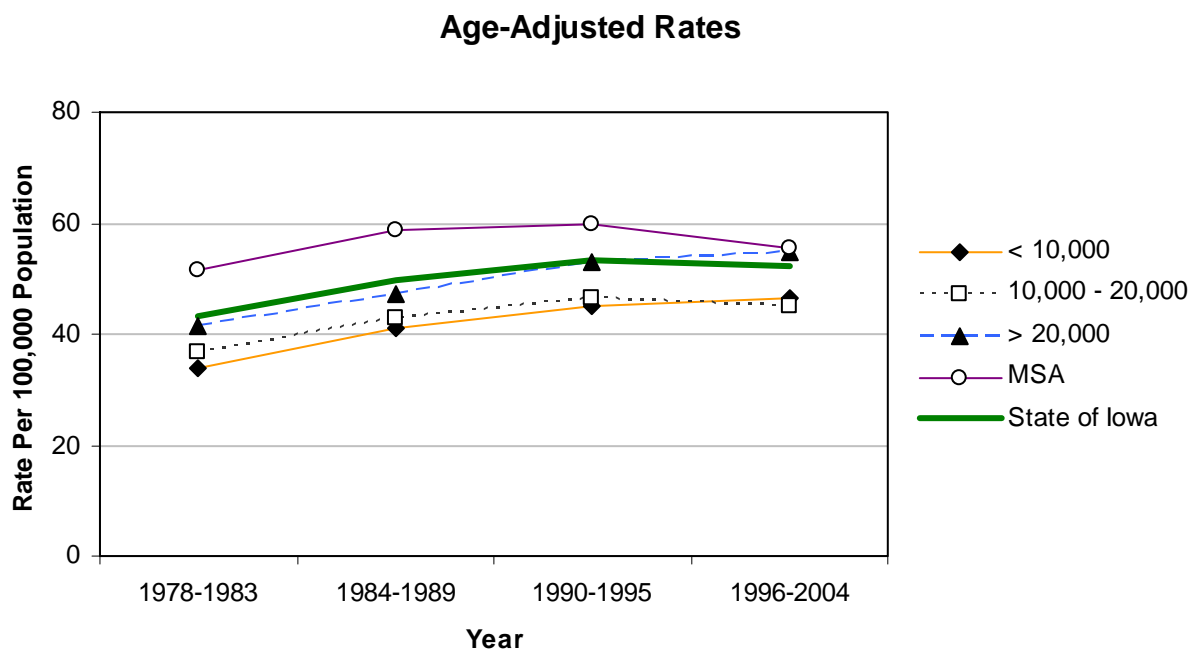
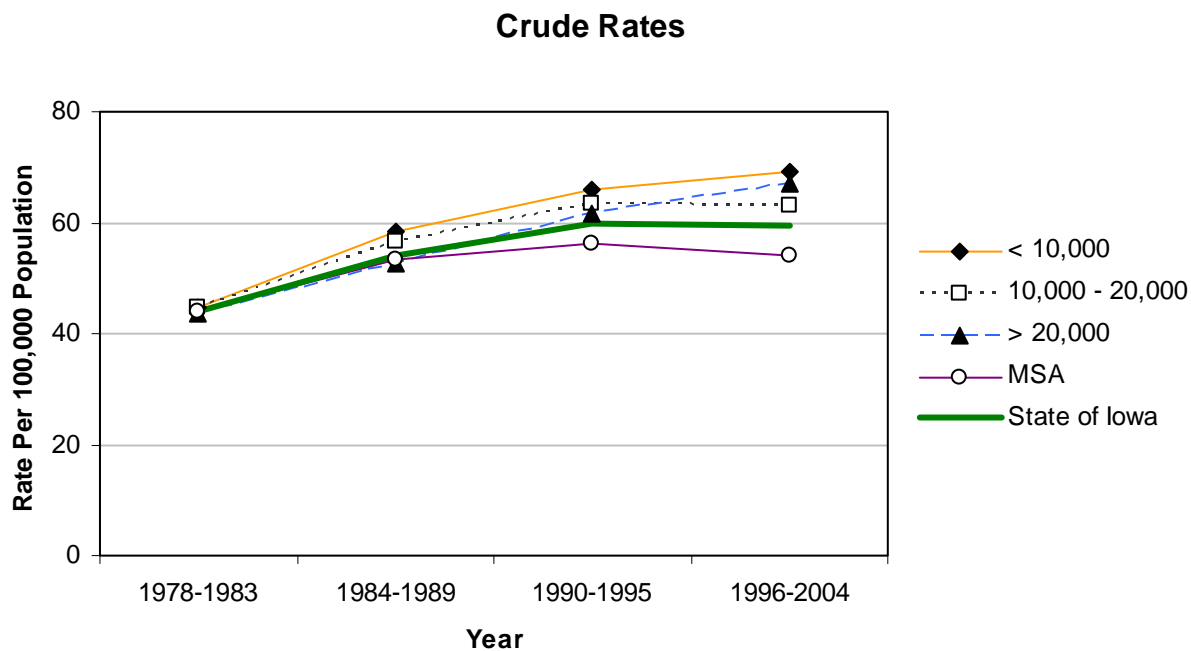
Lung Cancer Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	58	79.0 (10)	52.5 (37)	Monona	89	99.6 (02)	57.8 (16)
	Adams	31	77.5 (14)	51.1 (40)	Monroe	62	86.3 (03)	61.8 (06)
	Audubon	35	57.7 (64)	36.9 (89)	Osceola	35	55.7 (71)	41.5 (74)
	Clarke	41	50.5 (81)	37.2 (87)	Palo Alto	69	76.3 (16)	48.4 (49)
	Davis	45	58.4 (62)	43.5 (67)	Pocahontas	63	81.5 (06)	50.7 (41)
	Decatur	39	50.5 (81)	40.0 (78)	Ringgold	35	71.9 (29)	40.5 (76)
	Fremont	61	85.4 (04)	59.1 (12)	Taylor	32	51.5 (79)	35.9 (93)
	Howard	47	52.7 (76)	35.1 (94)	Van Buren	46	65.9 (44)	45.1 (60)
	Ida	33	47.1 (88)	29.5 (98)	Wayne	61	100.5 (01)	61.0 (08)
	Lucas	56	65.9 (44)	47.8 (51)	Worth	50	70.7 (33)	50.0 (43)
					Total	988	69.1	46.4
Counties with Average Population 10,000 – 20,000	Allamakee	71	54.2 (75)	38.2 (84)	Hardin	133	79.1 (09)	53.0 (34)
	Appanoose	81	65.9 (44)	44.7 (65)	Humboldt	65	70.1 (36)	45.4 (58)
	Butler	82	59.7 (56)	39.7 (79)	Iowa	77	54.6 (74)	43.8 (66)
	Calhoun	75	75.5 (19)	45.9 (56)	Jefferson	62	42.4 (93)	37.5 (86)
	Cass	95	72.2 (27)	47.1 (53)	Keokuk	78	76.1 (17)	57.7 (18)
	Cedar	94	57.6 (65)	46.6 (54)	Kossuth	95	62.0 (49)	41.6 (73)
	Cherokee	77	66.0 (43)	43.1 (70)	Louisa	62	56.7 (67)	51.6 (38)
	Chickasaw	80	68.2 (40)	51.5 (39)	Lyon	43	40.6 (96)	29.7 (97)
	Clay	81	52.0 (78)	39.1 (83)	Mitchell	62	63.3 (48)	40.9 (75)
	Clayton	100	59.6 (57)	43.4 (68)	Montgomery	78	74.4 (23)	53.3 (33)
	Crawford	80	52.6 (77)	40.3 (77)	O'Brien	90	66.5 (42)	43.4 (68)
	Delaware	75	45.5 (90)	39.2 (81)	Page	120	78.9 (11)	55.1 (27)
	Dickinson	106	72.2 (27)	46.3 (55)	Poweshiek	99	58.2 (63)	44.8 (63)
	Emmet	61	61.6 (52)	45.1 (60)	Sac	71	68.9 (39)	45.1 (60)
	Floyd	105	69.4 (37)	48.3 (50)	Shelby	59	50.1 (84)	36.2 (91)
	Franklin	55	56.7 (67)	37.0 (88)	Tama	100	61.8 (51)	45.8 (57)
	Greene	66	71.5 (30)	49.8 (45)	Union	86	78.1 (12)	57.8 (16)
	Hamilton	110	74.8 (21)	55.6 (24)	Winnebago	50	47.8 (87)	36.8 (90)
	Hancock	64	59.3 (59)	44.8 (63)	Wright	97	75.8 (18)	49.2 (47)
					Total	3,085	62.9	45.0
Counties with Average Population > 20,000	Boone	163	69.3 (38)	56.8 (21)	Lee	285	83.8 (05)	65.9 (01)
	Buchanan	112	59.2 (60)	52.7 (36)	Mahaska	143	71.5 (30)	59.4 (11)
	Buena Vista	79	43.2 (92)	33.6 (95)	Marion	166	57.5 (66)	49.4 (46)
	Carroll	136	70.7 (33)	53.4 (32)	Marshall	288	81.5 (06)	64.8 (03)
	Cerro Gordo	338	81.4 (08)	62.1 (05)	Muscatine	226	60.1 (54)	58.2 (15)
	Clinton	303	67.1 (41)	55.1 (27)	Plymouth	103	46.2 (89)	39.2 (81)
	Des Moines	295	78.0 (13)	62.2 (04)	Sioux	88	30.8 (98)	27.2 (99)
	Fayette	152	77.3 (15)	54.5 (29)	Wapello	241	74.5 (22)	57.2 (19)
	Henry	110	60.5 (53)	53.5 (31)	Webster	269	75.2 (20)	59.5 (10)
	Jackson	134	73.6 (25)	57.2 (19)	Winneshiek	81	42.4 (93)	36.2 (91)
	Jasper	241	72.3 (26)	58.7 (13)	Total	3,953	67.2	54.8
MSA Counties	Benton	134	58.5 (61)	50.6 (42)	Linn	949	55.2 (73)	56.0 (22)
	Black Hawk	681	59.6 (57)	55.4 (25)	Madison	62	48.9 (86)	42.9 (71)
	Bremer	106	50.4 (83)	39.7 (79)	Mills	66	50.6 (80)	49.2 (47)
	Dallas	185	49.4 (85)	55.7 (23)	Polk	1,871	55.4 (72)	61.3 (07)
	Dubuque	484	60.1 (54)	53.0 (34)	Pottawattamie	553	70.4 (35)	65.5 (02)
	Grundy	62	55.9 (70)	37.8 (85)	Scott	802	56.2 (69)	58.4 (14)
	Guthrie	76	74.3 (24)	49.9 (44)	Story	231	32.4 (97)	41.9 (72)
	Harrison	100	71.2 (32)	53.8 (30)	Warren	161	43.9 (91)	45.4 (58)
	Johnson	301	30.1 (99)	47.7 (52)	Washington	79	42.2 (95)	32.0 (96)
	Jones	120	65.5 (47)	55.4 (25)	Woodbury	578	62.0 (49)	60.0 (09)
					Total	7,601	54.0	55.4
	State Total	15,627	59.5	52.2				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Lung Cancer Mortality by County Group 1978-2004



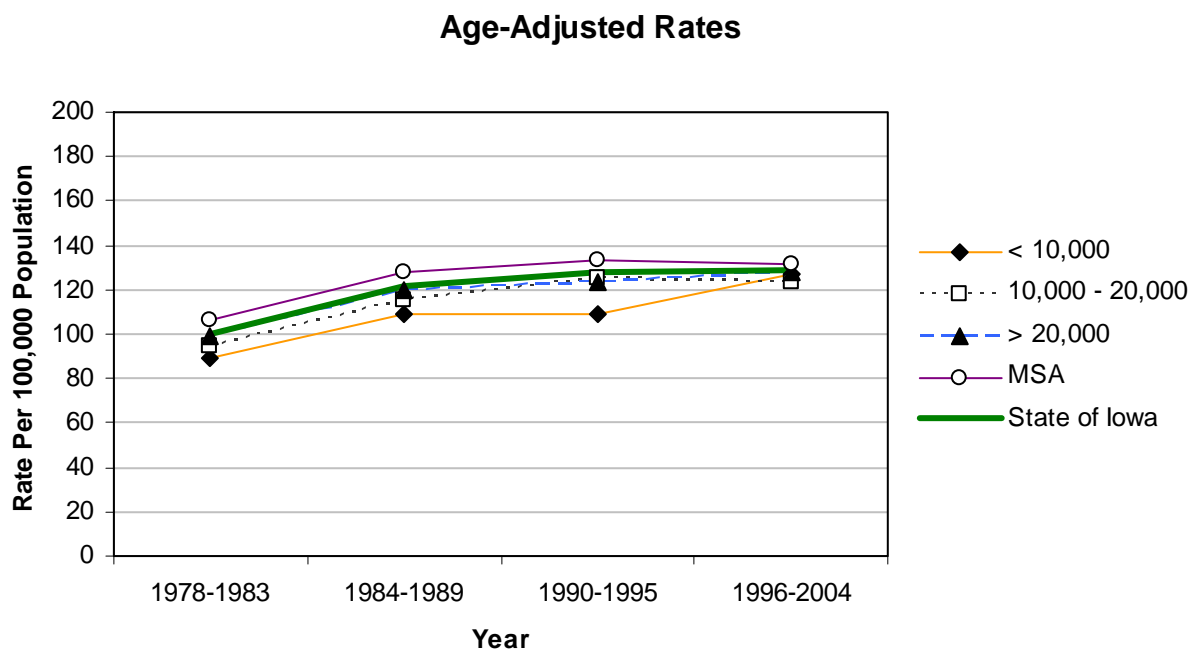
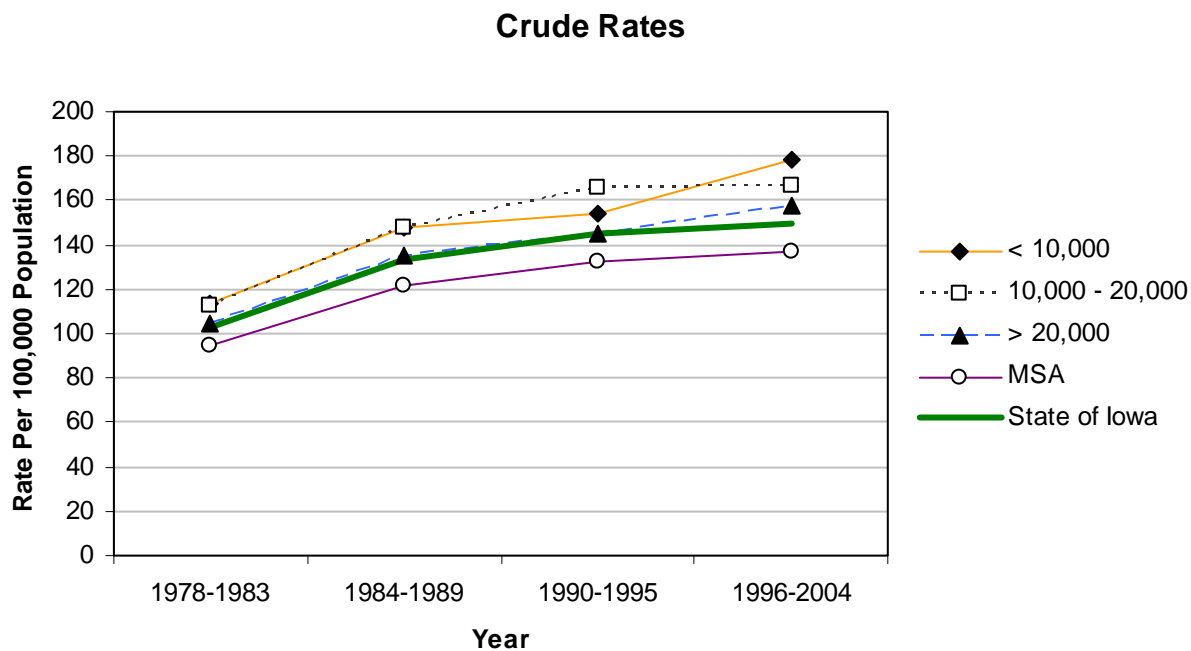
Female Breast Cancer Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	59	157.2 (55)	105.6 (93)	Monona	79	171.4 (36)	110.8 (87)
	Adams	43	212.0 (05)	146.4 (10)	Monroe	63	171.4 (36)	129.4 (39)
	Audubon	63	200.0 (11)	136.2 (22)	Osceola	68	211.5 (06)	157.1 (03)
	Clarke	50	120.8 (94)	96.2 (98)	Palo Alto	81	175.2 (30)	129.8 (38)
	Davis	58	149.1 (69)	116.6 (78)	Pocahontas	69	174.9 (31)	107.0 (92)
	Decatur	54	136.6 (86)	114.2 (79)	Ringgold	56	222.9 (03)	147.3 (09)
	Fremont	87	238.2 (01)	165.5 (01)	Taylor	72	224.2 (02)	153.0 (04)
	Howard	79	174.9 (31)	128.9 (42)	Van Buren	57	162.5 (50)	122.3 (63)
	Ida	75	208.5 (07)	149.6 (07)	Wayne	66	207.9 (09)	131.6 (30)
	Lucas	71	162.0 (53)	122.3 (63)	Worth	55	153.8 (62)	108.9 (90)
					Total	1,305	178.5	126.9
Counties with Average Population 10,000 – 20,000	Allamakee	100	152.7 (65)	116.9 (77)	Hardin	157	183.1 (20)	127.6 (48)
	Appanoose	97	151.5 (67)	104.3 (96)	Humboldt	89	187.9 (17)	137.3 (18)
	Butler	120	172.2 (35)	119.8 (70)	Iowa	101	139.7 (82)	108.7 (91)
	Calhoun	97	194.5 (13)	128.6 (44)	Jefferson	84	112.6 (97)	90.3 (99)
	Cass	150	221.5 (04)	143.4 (12)	Keokuk	85	161.2 (54)	123.8 (60)
	Cedar	134	162.1 (52)	130.7 (33)	Kossuth	122	156.1 (58)	112.6 (84)
	Cherokee	107	180.5 (22)	124.3 (58)	Louisa	65	118.3 (95)	113.2 (82)
	Chickasaw	78	132.9 (88)	104.5 (95)	Lyon	109	204.0 (10)	161.3 (02)
	Clay	138	171.4 (36)	129.1 (40)	Mitchell	90	179.8 (25)	134.5 (26)
	Clayton	139	163.9 (46)	127.7 (47)	Montgomery	105	190.5 (15)	130.7 (33)
	Crawford	110	144.6 (76)	119.8 (70)	O'Brien	131	189.1 (16)	123.9 (59)
	Delaware	94	113.0 (96)	101.4 (97)	Page	135	180.5 (22)	124.5 (57)
	Dickinson	127	168.9 (40)	120.2 (69)	Poweshiek	163	184.7 (19)	142.7 (13)
	Emmet	92	181.1 (21)	136.4 (20)	Sac	102	194.1 (14)	125.9 (54)
	Floyd	127	162.3 (51)	117.7 (74)	Shelby	100	166.5 (43)	124.6 (56)
	Franklin	89	180.4 (24)	123.7 (61)	Tama	139	168.7 (41)	121.9 (66)
	Greene	82	173.2 (33)	129.1 (40)	Union	96	167.1 (42)	122.5 (62)
	Hamilton	114	153.3 (64)	112.4 (85)	Winnebago	79	147.2 (74)	104.9 (94)
	Hancock	93	169.5 (39)	130.3 (35)	Wright	136	208.1 (08)	149.5 (08)
					Total	4,176	158.0	128.1
Counties with Average Population > 20,000	Boone	185	153.8 (62)	126.3 (52)	Lee	254	147.7 (73)	113.6 (80)
	Buchanan	145	152.2 (66)	125.9 (54)	Mahaska	143	142.2 (79)	117.2 (76)
	Buena Vista	152	166.2 (44)	134.6 (25)	Marion	193	132.7 (89)	113.1 (83)
	Carroll	162	164.0 (45)	127.0 (49)	Marshall	308	172.4 (34)	135.6 (24)
	Cerro Gordo	381	176.5 (26)	137.5 (17)	Muscatine	285	150.3 (68)	136.4 (20)
	Clinton	379	163.1 (48)	133.1 (27)	Plymouth	176	157.0 (56)	131.8 (29)
	Des Moines	345	176.3 (27)	139.2 (16)	Sioux	188	129.4 (91)	119.1 (72)
	Fayette	154	154.5 (61)	109.9 (88)	Wapello	293	176.2 (28)	136.5 (19)
	Henry	128	143.0 (77)	120.6 (68)	Webster	293	163.2 (47)	127.0 (49)
	Jackson	143	154.7 (60)	122.0 (65)	Winneshiek	138	142.4 (78)	131.2 (32)
	Jasper	270	162.6 (49)	128.4 (45)	Total	4,715	156.2	127.9
MSA Counties	Benton	144	125.3 (92)	109.8 (89)	Linn	1,211	138.0 (85)	131.3 (31)
	Black Hawk	834	140.2 (81)	128.0 (46)	Madison	95	148.0 (72)	126.7 (51)
	Bremer	203	187.0 (18)	152.2 (05)	Mills	114	175.3 (29)	152.1 (06)
	Dallas	254	134.0 (87)	136.1 (23)	Polk	2,277	130.8 (90)	130.2 (36)
	Dubuque	572	138.4 (84)	121.8 (67)	Pottawattamie	599	148.8 (70)	132.1 (28)
	Grundy	113	199.0 (12)	141.2 (15)	Scott	1,080	148.2 (71)	141.7 (14)
	Guthrie	81	156.1 (58)	112.4 (85)	Story	391	112.6 (97)	129.9 (37)
	Harrison	105	146.8 (75)	119.0 (73)	Warren	231	122.8 (93)	117.7 (74)
	Johnson	556	110.6 (99)	145.8 (11)	Washington	137	141.4 (80)	113.4 (81)
	Jones	136	156.3 (57)	126.3 (52)	Woodbury	665	139.7 (82)	128.8 (43)
					Total	9,798	136.5	131.1
	State Total	19,994	149.3	128.7				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Female Breast Cancer Incidence by County Group 1978-2004



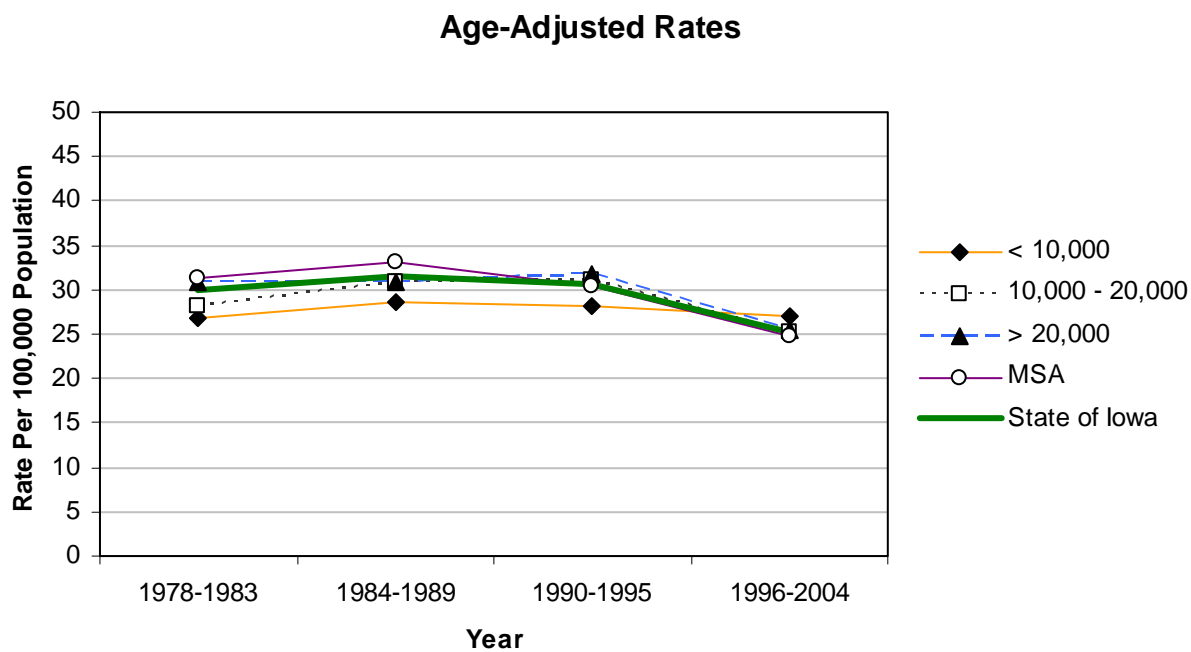
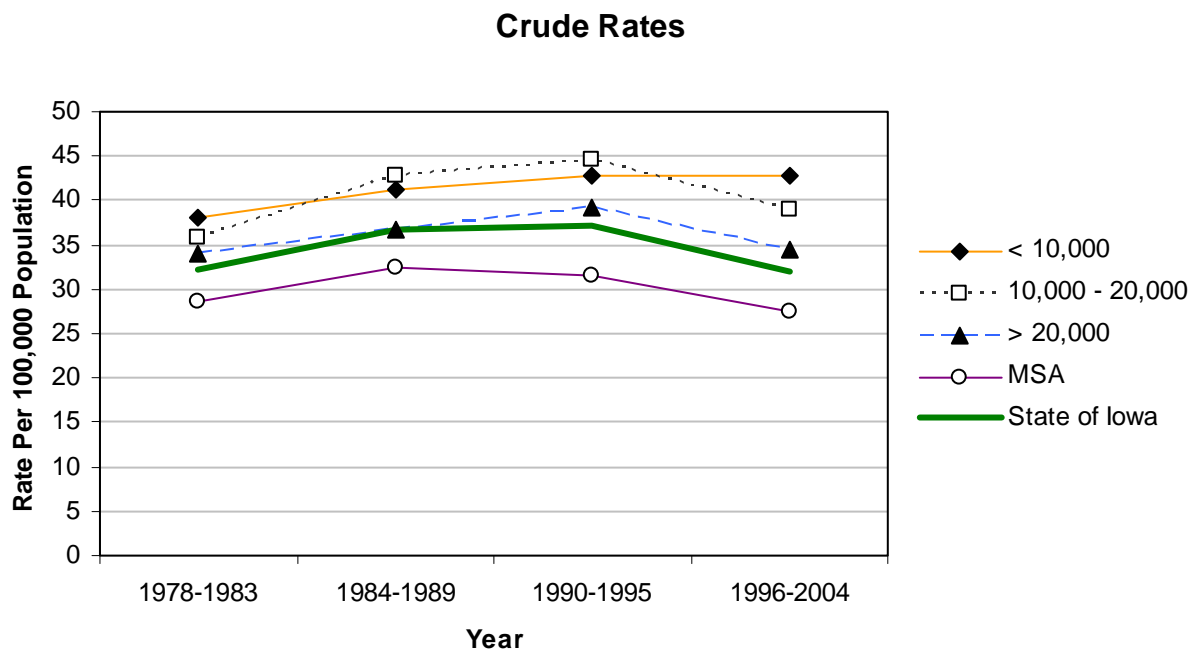
Female Breast Cancer Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	15	40.0 (37)	21.5 (75)	Monona	19	41.2 (30)	20.9 (80)
	Adams	9	44.4 (19)	27.2 (36)	Monroe	14	38.1 (43)	25.4 (48)
	Audubon	11	34.9 (56)	21.9 (72)	Osceola	13	40.4 (34)	27.6 (33)
	Clarke	17	41.1 (32)	31.0 (16)	Palo Alto	25	54.1 (10)	30.3 (19)
	Davis	4	10.3 (99)	7.3 (99)	Pocahontas	12	30.4 (72)	19.3 (85)
	Decatur	17	43.0 (24)	32.1 (13)	Ringgold	9	35.8 (53)	14.4 (96)
	Fremont	24	65.7 (02)	43.7 (01)	Taylor	19	59.2 (04)	36.9 (05)
	Howard	30	66.4 (01)	43.4 (02)	Van Buren	19	54.2 (09)	38.1 (03)
	Ida	20	55.6 (06)	34.9 (07)	Wayne	14	44.1 (20)	21.9 (72)
	Lucas	12	27.4 (84)	16.6 (93)	Worth	10	28.0 (81)	20.7 (82)
					Total	313	42.8	27.0
Counties with Average Population 10,000 – 20,000	Allamakee	22	33.6 (61)	20.9 (80)	Hardin	47	54.8 (07)	32.5 (11)
	Appanoose	22	34.4 (58)	24.4 (61)	Humboldt	19	40.1 (35)	22.7 (68)
	Butler	32	45.9 (14)	25.2 (51)	Iowa	30	41.5 (29)	29.8 (20)
	Calhoun	16	32.1 (67)	12.8 (97)	Jefferson	27	36.2 (51)	28.3 (29)
	Cass	22	32.5 (65)	18.4 (88)	Keokuk	9	17.1 (98)	11.2 (98)
	Cedar	33	39.9 (38)	27.3 (34)	Kossuth	30	38.4 (42)	24.8 (56)
	Cherokee	27	45.5 (15)	27.3 (34)	Louisa	14	25.5 (88)	19.9 (84)
	Chickasaw	16	27.3 (85)	21.2 (77)	Lyon	26	48.7 (13)	35.6 (06)
	Clay	36	44.7 (17)	29.5 (23)	Mitchell	16	32.0 (68)	22.1 (70)
	Clayton	34	40.1 (35)	29.1 (24)	Montgomery	22	39.9 (38)	24.8 (56)
	Crawford	16	21.0 (95)	15.0 (95)	O'Brien	30	43.3 (22)	28.6 (27)
	Delaware	26	31.3 (70)	25.0 (54)	Page	34	45.5 (15)	24.6 (59)
	Dickinson	31	41.2 (30)	25.2 (51)	Poweshiek	33	37.4 (45)	26.8 (41)
	Emmet	31	61.0 (03)	34.4 (08)	Sac	28	53.3 (11)	31.5 (14)
	Floyd	31	39.6 (40)	24.8 (56)	Shelby	15	25.0 (89)	17.2 (92)
	Franklin	27	54.7 (08)	29.8 (20)	Tama	35	42.5 (26)	30.5 (18)
	Greene	16	33.8 (60)	20.5 (83)	Union	24	41.8 (28)	25.4 (48)
	Hamilton	29	39.0 (41)	27.0 (39)	Winnebago	24	44.7 (17)	27.1 (37)
	Hancock	13	23.7 (92)	18.9 (86)	Wright	33	50.5 (12)	29.6 (22)
					Total	976	39.0	25.3
Counties with Average Population > 20,000	Boone	37	30.8 (71)	22.9 (67)	Lee	63	36.6 (50)	26.7 (42)
	Buchanan	39	40.9 (33)	30.9 (17)	Mahaska	43	42.8 (25)	31.1 (15)
	Buena Vista	30	32.8 (63)	25.5 (47)	Marion	51	35.1 (55)	27.7 (32)
	Carroll	42	42.5 (26)	28.4 (28)	Marshall	61	34.2 (59)	25.2 (51)
	Cerro Gordo	77	35.7 (54)	26.3 (45)	Muscatine	62	32.7 (64)	28.0 (30)
	Clinton	86	37.0 (47)	27.9 (31)	Plymouth	39	34.8 (57)	27.1 (37)
	Des Moines	58	29.6 (76)	22.0 (71)	Sioux	36	24.8 (91)	18.7 (87)
	Fayette	37	37.1 (46)	24.4 (61)	Wapello	63	37.9 (44)	28.7 (26)
	Henry	27	30.2 (73)	24.3 (63)	Webster	65	36.2 (51)	25.0 (54)
	Jackson	23	24.9 (90)	18.0 (91)	Winneshiek	25	25.8 (87)	18.2 (89)
	Jasper	61	36.7 (49)	27.0 (39)	Total	1,025	34.4	25.5
MSA Counties	Benton	24	20.9 (96)	15.4 (94)	Linn	205	23.4 (93)	21.1 (78)
	Black Hawk	165	27.7 (82)	23.6 (64)	Madison	28	43.6 (21)	33.5 (10)
	Bremer	40	36.8 (48)	25.3 (50)	Mills	28	43.1 (23)	38.1 (03)
	Dallas	63	33.2 (62)	32.3 (12)	Polk	480	27.6 (83)	26.6 (44)
	Dubuque	112	27.1 (86)	21.5 (75)	Pottawattamie	121	30.1 (74)	25.8 (46)
	Grundy	32	56.4 (05)	33.6 (09)	Scott	212	29.1 (78)	26.7 (42)
	Guthrie	15	28.9 (79)	18.2 (89)	Story	76	21.9 (94)	23.1 (66)
	Harrison	21	29.4 (77)	21.8 (74)	Warren	59	31.4 (69)	28.9 (25)
	Johnson	95	18.9 (97)	24.6 (59)	Washington	29	29.9 (75)	21.0 (79)
	Jones	28	32.2 (66)	22.5 (69)	Woodbury	134	28.1 (80)	23.2 (65)
					Total	1,967	27.4	24.8
	State Total	4,281	32.0	25.2				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Female Breast Cancer Mortality by County Group 1978-2004



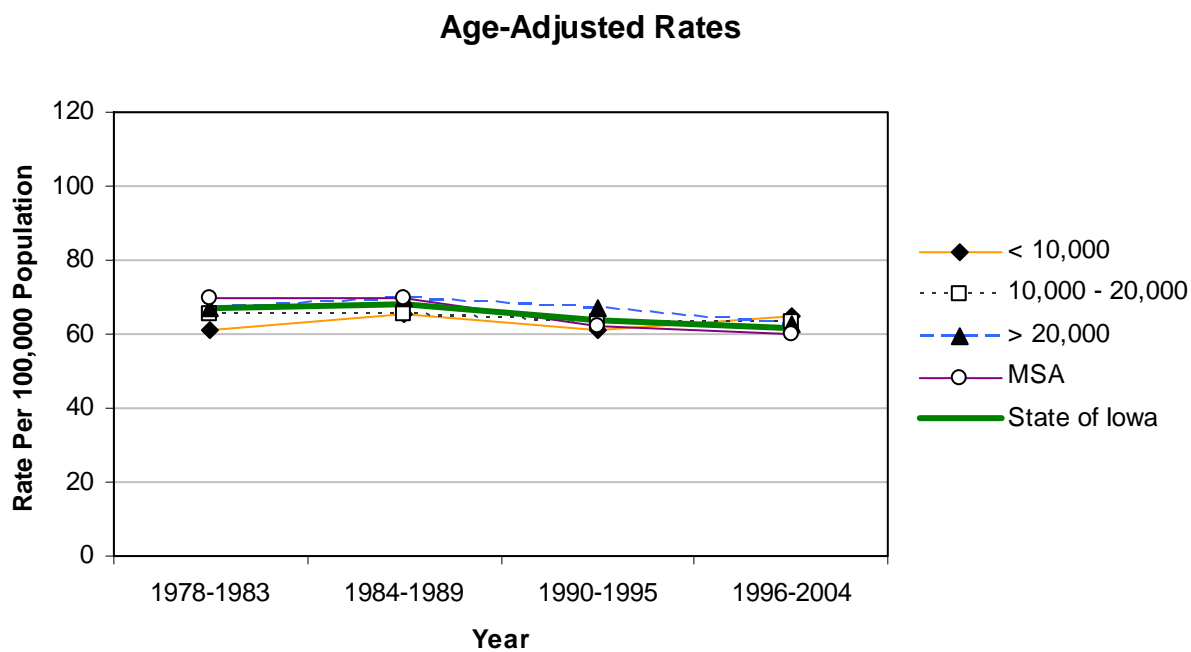
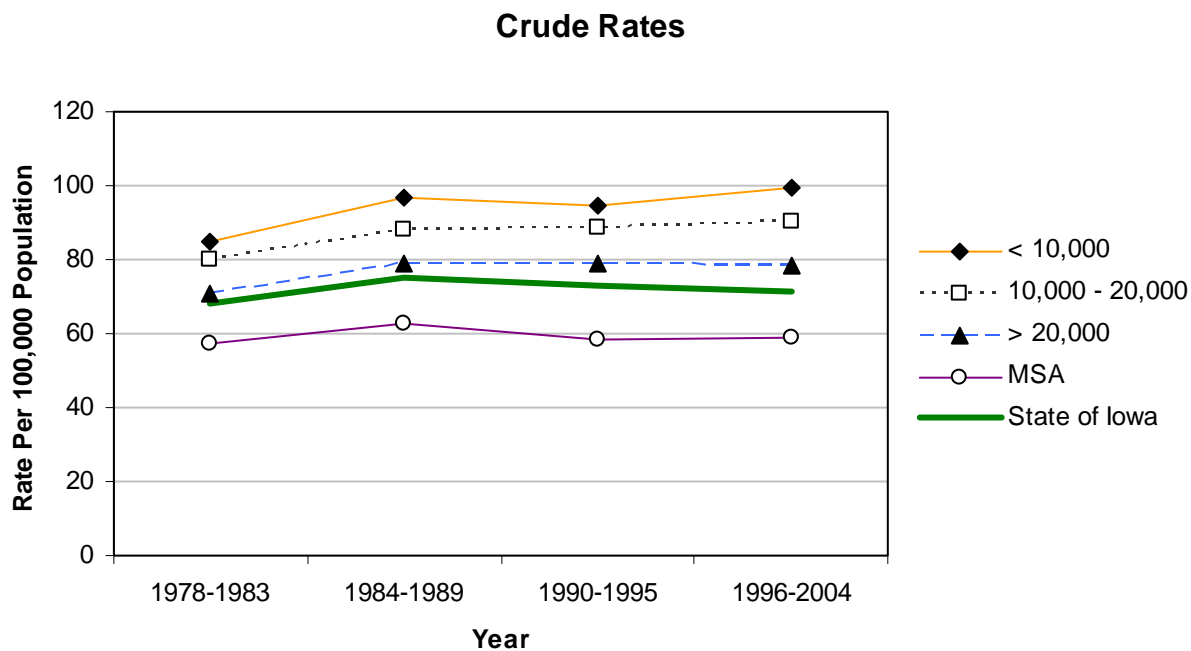
Colorectal Cancer Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	66	89.8 (41)	53.8 (88)	Monona	114	127.6 (02)	68.4 (23)
	Adams	35	87.5 (46)	58.3 (75)	Monroe	51	71.0 (81)	47.7 (97)
	Audubon	81	133.5 (01)	82.9 (01)	Osceola	62	98.7 (24)	67.7 (28)
	Clarke	65	80.1 (61)	60.9 (62)	Palo Alto	107	118.3 (04)	77.3 (03)
	Davis	61	79.2 (62)	55.8 (84)	Pocahontas	94	121.5 (03)	75.2 (05)
	Decatur	66	85.4 (51)	67.3 (31)	Ringgold	47	96.5 (29)	57.4 (80)
	Fremont	74	103.7 (17)	73.3 (11)	Taylor	61	98.2 (27)	60.6 (65)
	Howard	96	107.7 (09)	72.2 (13)	Van Buren	49	70.2 (84)	47.1 (98)
	Ida	75	107.1 (10)	66.0 (37)	Wayne	70	115.3 (06)	68.1 (26)
	Lucas	85	100.0 (22)	67.4 (30)	Worth	61	86.2 (49)	58.2 (76)
					Total	1,420	99.4	64.9
Counties with Average Population 10,000 – 20,000	Allamakee	127	96.9 (28)	71.5 (15)	Hardin	171	101.7 (21)	65.4 (40)
	Appanoose	138	112.3 (07)	74.2 (10)	Humboldt	92	99.2 (23)	64.0 (46)
	Butler	118	86.0 (50)	55.4 (85)	Iowa	111	78.7 (63)	58.4 (74)
	Calhoun	104	104.6 (15)	61.9 (56)	Jefferson	91	62.2 (90)	52.8 (90)
	Cass	126	95.8 (32)	59.0 (72)	Keokuk	87	84.9 (52)	57.8 (79)
	Cedar	122	74.7 (71)	58.9 (73)	Kossuth	145	94.7 (35)	66.0 (37)
	Cherokee	125	107.1 (10)	70.1 (17)	Louisa	58	53.1 (95)	47.1 (98)
	Chickasaw	84	71.6 (80)	53.2 (89)	Lyon	98	92.6 (37)	69.4 (21)
	Clay	130	83.4 (54)	61.1 (60)	Mitchell	101	103.1 (18)	68.4 (23)
	Clayton	153	91.1 (39)	67.2 (32)	Montgomery	122	116.4 (05)	76.9 (04)
	Crawford	129	84.8 (53)	64.9 (42)	O'Brien	145	107.1 (10)	69.9 (18)
	Delaware	125	75.8 (70)	64.3 (44)	Page	146	96.0 (31)	66.2 (36)
	Dickinson	135	92.0 (38)	59.1 (71)	Poweshiek	168	98.7 (24)	74.3 (09)
	Emmet	89	89.8 (41)	63.8 (48)	Sac	112	108.8 (08)	63.9 (47)
	Floyd	126	83.3 (55)	58.1 (77)	Shelby	123	104.5 (16)	70.5 (16)
	Franklin	92	94.8 (34)	65.1 (41)	Tama	170	105.1 (13)	72.5 (12)
	Greene	97	105.0 (14)	62.3 (55)	Union	97	88.1 (45)	61.0 (61)
	Hamilton	104	70.7 (83)	52.6 (91)	Winnebago	67	64.0 (89)	49.7 (94)
	Hancock	82	76.0 (69)	56.0 (83)	Wright	132	103.1 (18)	65.6 (39)
					Total	4,442	90.5	63.4
Counties with Average Population > 20,000	Boone	172	73.1 (75)	58.1 (77)	Lee	245	72.0 (79)	56.3 (81)
	Buchanan	155	81.9 (57)	71.9 (14)	Mahaska	154	77.0 (66)	61.8 (57)
	Buena Vista	176	96.2 (30)	74.6 (08)	Marion	175	60.6 (91)	49.6 (95)
	Carroll	167	86.8 (48)	62.7 (53)	Marshall	272	77.0 (66)	60.8 (63)
	Cerro Gordo	276	66.5 (87)	49.5 (96)	Muscatine	267	71.0 (81)	68.6 (22)
	Clinton	363	80.4 (60)	64.7 (43)	Plymouth	209	93.8 (36)	78.4 (02)
	Des Moines	339	89.6 (43)	69.7 (19)	Sioux	212	74.3 (72)	67.0 (33)
	Fayette	160	81.3 (59)	56.2 (82)	Wapello	267	82.5 (56)	63.4 (51)
	Henry	133	73.1 (75)	61.2 (59)	Webster	292	81.7 (58)	63.8 (48)
	Jackson	162	88.9 (44)	68.2 (25)	Winneshiek	142	74.3 (72)	63.0 (52)
	Jasper	259	77.7 (65)	63.8 (48)	Total	4,597	78.2	62.8
MSA Counties	Benton	180	78.6 (64)	66.5 (34)	Linn	1,042	60.6 (91)	60.8 (63)
	Black Hawk	752	65.8 (88)	60.4 (66)	Madison	93	73.3 (74)	59.2 (70)
	Bremer	161	76.6 (68)	61.6 (58)	Mills	95	72.8 (77)	68.0 (27)
	Dallas	212	56.6 (94)	62.5 (54)	Polk	1,691	50.0 (97)	54.8 (86)
	Dubuque	546	67.8 (85)	59.4 (69)	Pottawattamie	567	72.1 (78)	67.7 (28)
	Grundy	97	87.4 (47)	59.9 (68)	Scott	827	58.0 (93)	60.1 (67)
	Guthrie	101	98.7 (24)	66.3 (35)	Story	292	40.9 (98)	50.4 (93)
	Harrison	143	101.8 (20)	74.9 (06)	Warren	185	50.4 (96)	52.0 (92)
	Johnson	362	36.3 (99)	54.6 (87)	Washington	178	95.0 (33)	69.5 (20)
	Jones	167	91.1 (39)	74.9 (06)	Woodbury	626	67.1 (86)	64.1 (45)
					Total	8,317	59.1	59.9
	State Total	18,776	71.4	61.7				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Colorectal Cancer Incidence by County Group 1978-2004



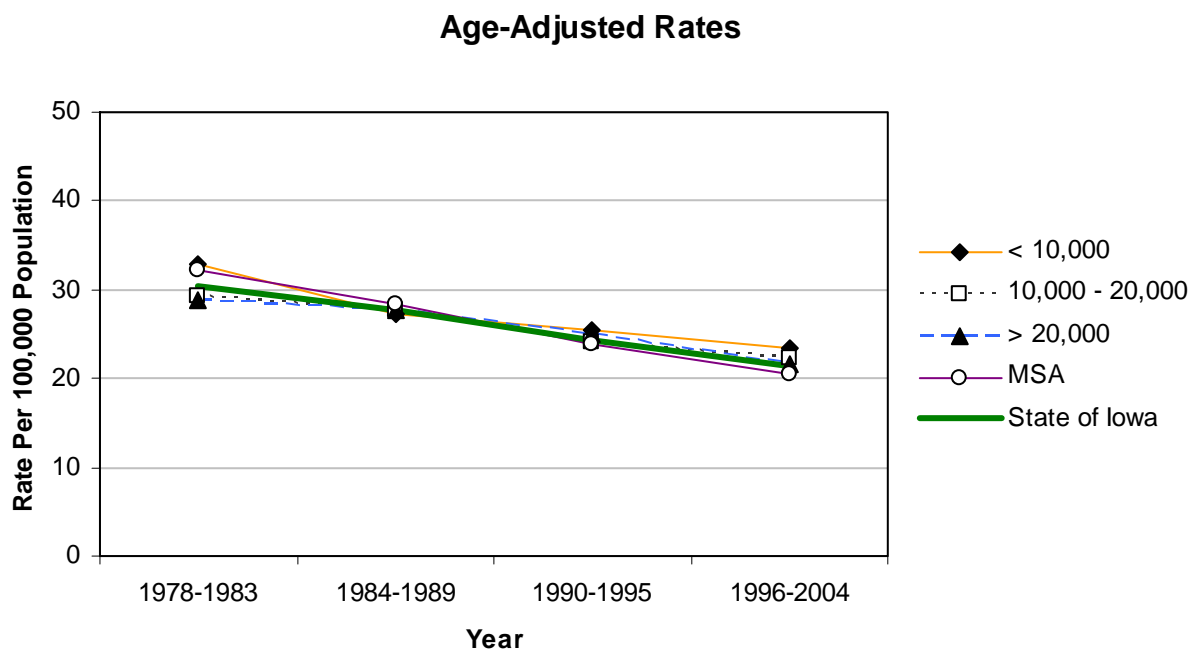
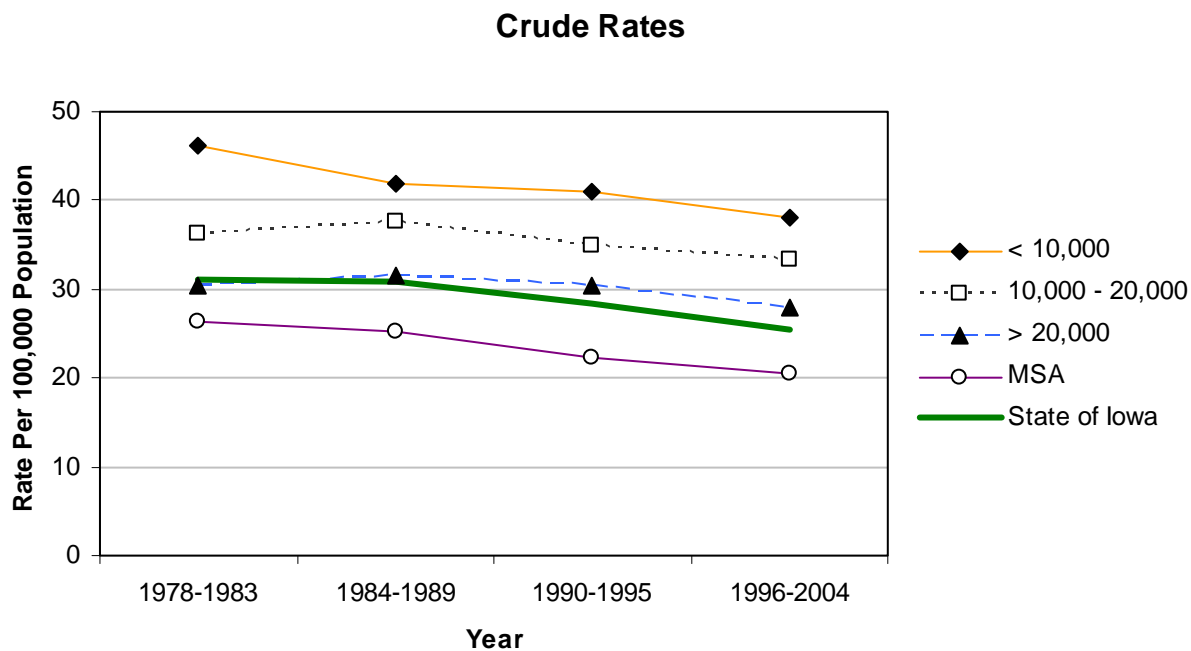
Colorectal Cancer Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	35	47.6 (03)	28.3 (09)	Monona	46	51.5 (02)	27.1 (14)
	Adams	14	35.0 (32)	21.0 (58)	Monroe	21	29.2 (58)	20.0 (70)
	Audubon	20	33.0 (39)	18.6 (87)	Osceola	11	17.5 (97)	11.4 (99)
	Clarke	24	29.6 (56)	20.3 (64)	Palo Alto	39	43.1 (09)	27.7 (10)
	Davis	25	32.5 (41)	21.9 (49)	Pocahontas	33	42.7 (11)	24.7 (24)
	Decatur	31	40.1 (15)	30.5 (05)	Ringgold	21	43.1 (09)	22.5 (42)
	Fremont	33	46.2 (06)	30.6 (04)	Taylor	26	41.9 (12)	23.6 (32)
	Howard	33	37.0 (26)	22.4 (44)	Van Buren	26	37.2 (23)	25.8 (17)
	Ida	25	35.7 (30)	21.5 (52)	Wayne	36	59.3 (01)	32.2 (02)
	Lucas	23	27.0 (72)	16.6 (95)	Worth	23	32.5 (41)	19.6 (74)
					Total	545	38.1	23.5
Counties with Average Population 10,000 – 20,000	Allamakee	54	41.2 (13)	29.0 (08)	Hardin	57	33.9 (38)	19.7 (73)
	Appanoose	58	47.2 (04)	29.6 (06)	Humboldt	35	37.7 (22)	23.6 (32)
	Butler	44	32.1 (45)	20.6 (62)	Iowa	41	29.1 (60)	20.3 (64)
	Calhoun	36	36.2 (28)	20.6 (62)	Jefferson	26	17.8 (96)	15.7 (97)
	Cass	39	29.6 (56)	17.4 (93)	Keokuk	31	30.3 (50)	20.0 (70)
	Cedar	46	28.2 (68)	21.5 (52)	Kossuth	44	28.7 (65)	18.1 (90)
	Cherokee	35	30.0 (53)	19.0 (81)	Louisa	29	26.5 (73)	22.8 (38)
	Chickasaw	34	29.0 (64)	21.2 (57)	Lyon	37	35.0 (32)	24.5 (26)
	Clay	49	31.4 (47)	21.3 (56)	Mitchell	30	30.6 (48)	21.4 (55)
	Clayton	65	38.7 (20)	26.6 (15)	Montgomery	40	38.2 (21)	23.9 (30)
	Crawford	55	36.2 (28)	26.3 (16)	O'Brien	46	34.0 (36)	20.2 (67)
	Delaware	67	40.6 (14)	34.1 (01)	Page	43	28.3 (67)	18.8 (83)
	Dickinson	54	36.8 (27)	22.5 (42)	Poweshiek	67	39.4 (17)	27.6 (11)
	Emmet	30	30.3 (50)	21.0 (58)	Sac	48	46.6 (05)	27.3 (13)
	Floyd	45	29.7 (54)	19.4 (76)	Shelby	47	39.9 (16)	24.9 (21)
	Franklin	27	27.8 (70)	17.6 (92)	Tama	60	37.1 (25)	23.8 (31)
	Greene	40	43.3 (08)	22.2 (46)	Union	41	37.2 (23)	24.2 (28)
	Hamilton	32	21.8 (87)	16.0 (96)	Winnebago	20	19.1 (93)	12.9 (98)
	Hancock	37	34.3 (34)	24.9 (21)	Wright	50	39.1 (18)	24.4 (27)
					Total	1,639	33.4	22.2
Counties with Average Population > 20,000	Boone	59	25.1 (78)	19.4 (76)	Lee	104	30.6 (48)	23.4 (35)
	Buchanan	54	28.5 (66)	24.2 (28)	Mahaska	51	25.5 (76)	20.3 (64)
	Buena Vista	71	38.8 (19)	29.5 (07)	Marion	68	23.6 (82)	18.3 (88)
	Carroll	68	35.3 (31)	24.9 (21)	Marshall	103	29.1 (60)	22.3 (45)
	Cerro Gordo	100	24.1 (80)	17.1 (94)	Muscatine	87	23.1 (83)	22.2 (46)
	Clinton	123	27.2 (71)	21.6 (50)	Plymouth	65	29.2 (58)	23.1 (37)
	Des Moines	114	30.1 (52)	22.8 (38)	Sioux	64	22.4 (85)	19.4 (76)
	Fayette	65	33.0 (39)	23.3 (36)	Wapello	96	29.7 (54)	22.1 (48)
	Henry	53	29.1 (60)	22.7 (41)	Webster	91	25.5 (76)	18.7 (85)
	Jackson	62	34.0 (36)	24.7 (24)	Winneshiek	61	31.9 (46)	25.8 (17)
	Jasper	80	24.0 (81)	19.4 (76)	Total	1,639	27.9	21.7
MSA Counties	Benton	59	25.8 (75)	21.5 (52)	Linn	361	21.0 (90)	20.8 (61)
	Black Hawk	249	21.8 (87)	19.6 (74)	Madison	33	26.0 (74)	20.9 (60)
	Bremer	48	22.8 (84)	18.2 (89)	Mills	38	29.1 (60)	27.4 (12)
	Dallas	83	22.2 (86)	25.0 (20)	Polk	621	18.4 (94)	20.1 (68)
	Dubuque	169	21.0 (90)	18.1 (90)	Pottawattamie	197	25.1 (78)	23.5 (34)
	Grundy	31	27.9 (69)	18.7 (85)	Scott	275	19.3 (92)	19.9 (72)
	Guthrie	35	34.2 (35)	21.6 (50)	Story	113	15.8 (98)	18.9 (82)
	Harrison	61	43.4 (07)	31.2 (03)	Warren	67	18.3 (95)	18.8 (83)
	Johnson	123	12.3 (99)	19.4 (76)	Washington	61	32.5 (41)	22.8 (38)
	Jones	59	32.2 (44)	25.7 (19)	Woodbury	200	21.5 (89)	20.1 (68)
					Total	2,883	20.5	20.5
	State Total	6,706	25.5	21.4				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Colorectal Cancer Mortality by County Group 1978-2004



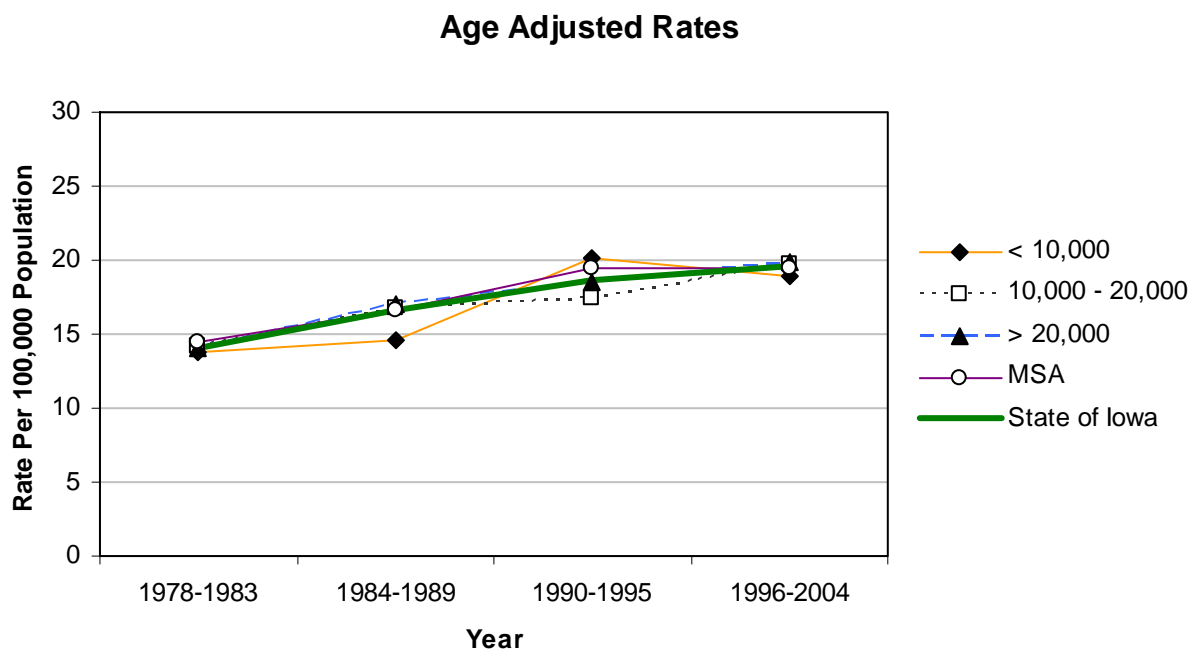
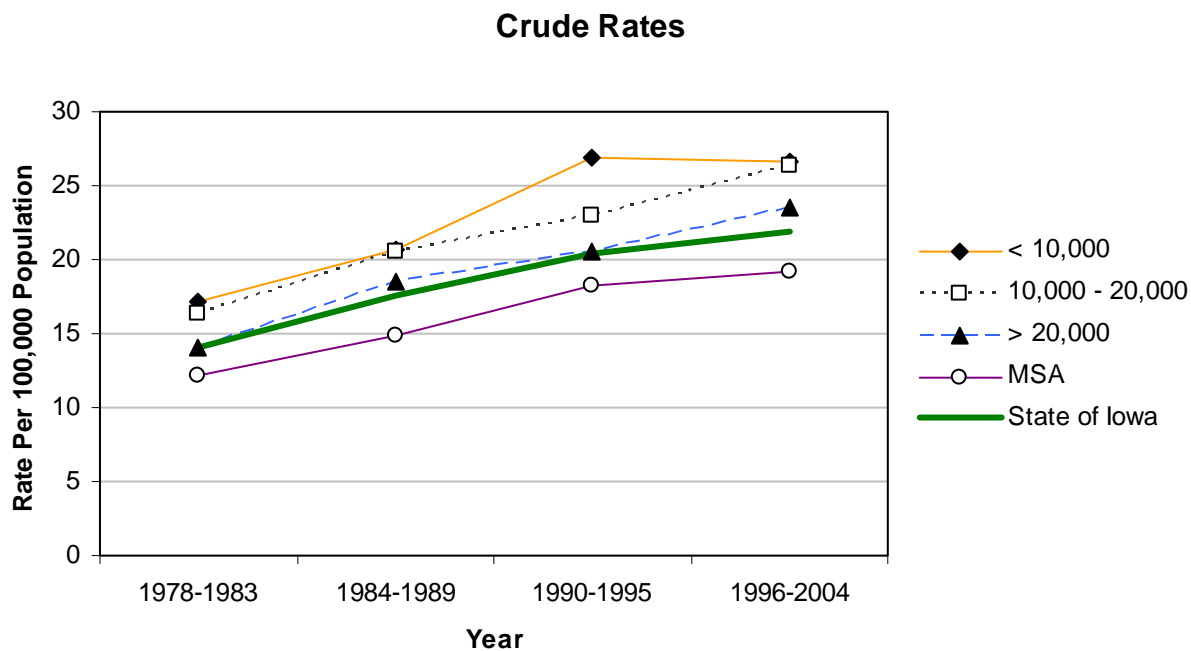
Non-Hodgkin's Lymphoma Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	20	27.2 (31)	22.3 (18)	Monona	31	34.7 (03)	21.7 (24)
	Adams	9	22.5 (66)	13.8 (94)	Monroe	18	25.1 (42)	17.7 (77)
	Audubon	13	21.4 (71)	14.1 (92)	Osceola	21	33.4 (04)	24.7 (08)
	Clarke	16	19.7 (81)	16.4 (84)	Palo Alto	23	25.4 (41)	17.4 (79)
	Davis	24	31.2 (11)	25.7 (04)	Pocahontas	20	25.9 (39)	18.8 (60)
	Decatur	27	34.9 (02)	28.1 (01)	Ringgold	15	30.8 (12)	19.4 (49)
	Fremont	15	21.0 (74)	16.1 (86)	Taylor	13	20.9 (76)	12.7 (97)
	Howard	20	22.4 (67)	16.5 (82)	Van Buren	17	24.4 (49)	19.3 (51)
	Ida	17	24.3 (51)	14.7 (91)	Wayne	25	41.2 (01)	26.0 (03)
	Lucas	22	25.9 (39)	19.0 (58)	Worth	14	19.8 (80)	13.3 (95)
					Total	380	26.6	18.9
Counties with Average Population 10,000 – 20,000	Allamakee	30	22.9 (64)	16.1 (86)	Hardin	49	29.2 (21)	20.2 (39)
	Appanoose	32	26.0 (37)	18.4 (66)	Humboldt	20	21.6 (69)	15.9 (88)
	Butler	41	29.9 (15)	21.8 (23)	Iowa	35	24.8 (47)	19.9 (42)
	Calhoun	27	27.2 (31)	18.7 (61)	Jefferson	25	17.1 (97)	16.2 (85)
	Cass	37	28.1 (27)	20.7 (33)	Keokuk	33	32.2 (08)	23.3 (10)
	Cedar	48	29.4 (20)	23.3 (10)	Kossuth	51	33.3 (05)	24.8 (07)
	Cherokee	31	26.6 (35)	19.4 (49)	Louisa	21	19.2 (85)	18.0 (72)
	Chickasaw	36	30.7 (13)	24.0 (09)	Lyon	29	27.4 (30)	23.0 (15)
	Clay	43	27.6 (29)	23.2 (13)	Mitchell	29	29.6 (17)	21.3 (27)
	Clayton	42	25.0 (43)	18.9 (59)	Montgomery	29	27.7 (28)	19.1 (53)
	Crawford	38	25.0 (43)	19.9 (42)	O'Brien	45	33.2 (06)	22.0 (20)
	Delaware	22	13.3 (99)	11.9 (99)	Page	29	19.1 (86)	12.8 (96)
	Dickinson	42	28.6 (23)	20.5 (36)	Poweshiek	38	22.3 (68)	18.7 (61)
	Emmet	28	28.3 (26)	21.0 (30)	Sac	30	29.1 (22)	19.2 (52)
	Floyd	43	28.4 (24)	20.2 (39)	Shelby	32	27.2 (31)	18.2 (68)
	Franklin	18	18.6 (88)	12.6 (98)	Tama	49	30.3 (14)	23.0 (15)
	Greene	23	24.9 (45)	14.9 (90)	Union	27	24.5 (48)	17.9 (74)
	Hamilton	34	23.1 (62)	17.9 (74)	Winnebago	31	29.6 (17)	20.8 (32)
	Hancock	35	32.4 (07)	25.4 (06)	Wright	41	32.0 (10)	23.2 (13)
					Total	1,293	26.4	19.7
Counties with Average Population > 20,000	Boone	48	20.4 (78)	17.8 (76)	Lee	83	24.4 (49)	19.7 (44)
	Buchanan	34	18.0 (93)	16.5 (82)	Mahaska	43	21.5 (70)	17.5 (78)
	Buena Vista	43	23.5 (57)	19.1 (53)	Marion	67	23.2 (60)	20.6 (34)
	Carroll	62	32.2 (08)	26.4 (02)	Marshall	85	24.0 (54)	20.0 (41)
	Cerro Gordo	94	22.6 (65)	18.3 (67)	Muscatine	80	21.3 (73)	20.6 (34)
	Clinton	104	23.0 (63)	19.1 (53)	Plymouth	58	26.0 (37)	22.2 (19)
	Des Moines	88	23.3 (59)	18.7 (61)	Sioux	61	21.4 (71)	19.7 (44)
	Fayette	52	26.4 (36)	19.7 (44)	Wapello	92	28.4 (24)	23.3 (10)
	Henry	44	24.2 (53)	21.6 (26)	Webster	87	24.3 (51)	20.3 (38)
	Jackson	43	23.6 (55)	19.6 (47)	Winneshiek	45	23.6 (55)	20.5 (36)
	Jasper	70	21.0 (74)	18.0 (72)	Total	1,383	23.5	19.9
MSA Counties	Benton	57	24.9 (45)	21.7 (24)	Linn	318	18.5 (89)	18.7 (61)
	Black Hawk	233	20.4 (78)	19.1 (53)	Madison	22	17.3 (96)	15.0 (89)
	Bremer	41	19.5 (83)	16.7 (80)	Mills	23	17.6 (95)	16.6 (81)
	Dallas	73	19.5 (83)	21.3 (27)	Polk	614	18.2 (91)	19.5 (48)
	Dubuque	187	23.2 (60)	21.2 (29)	Pottawattamie	150	19.1 (86)	18.1 (71)
	Grundy	26	23.4 (58)	18.2 (68)	Scott	252	17.7 (94)	18.2 (68)
	Guthrie	21	20.5 (77)	14.1 (92)	Story	130	18.2 (91)	22.0 (20)
	Harrison	42	29.9 (15)	23.0 (15)	Warren	67	18.3 (90)	18.5 (65)
	Johnson	157	15.7 (98)	22.0 (20)	Washington	50	26.7 (34)	21.0 (30)
	Jones	54	29.5 (19)	25.6 (05)	Woodbury	183	19.6 (82)	19.1 (53)
					Total	2,700	19.2	19.5
	State Total	5,756	21.9	19.6				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Non-Hodgkin's Lymphoma Incidence by County Group 1978-2004



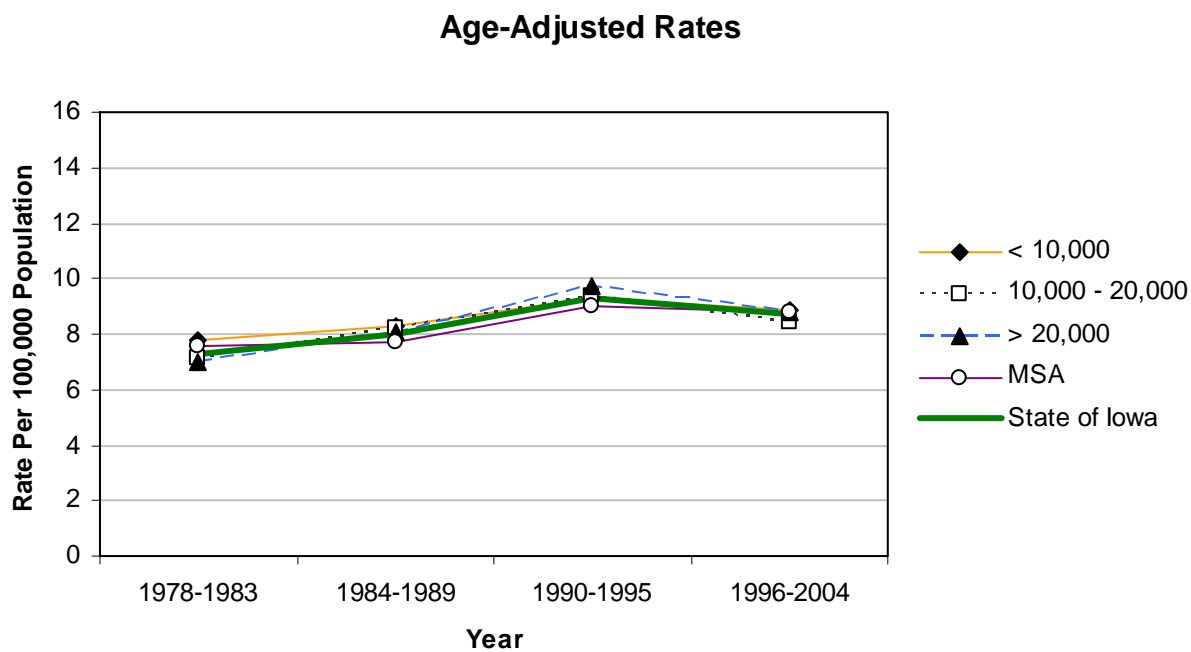
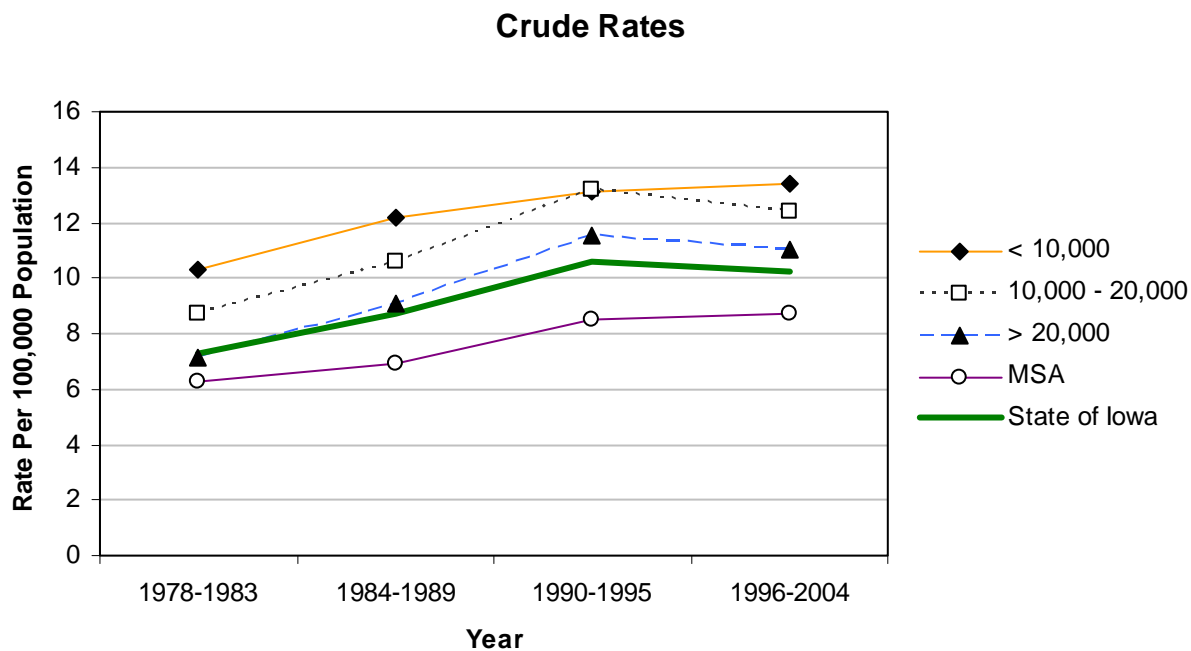
Non-Hodgkin's Lymphoma Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	17	23.1	14.6	Monona	13	14.5	8.8
	Adams	6	15.0	9.7	Monroe	5	7.0	5.1
	Audubon	*	*	*	Osceola	6	9.6	7.0
	Clarke	10	12.3	10.0	Palo Alto	16	17.7	12.5
	Davis	13	16.9	12.6	Pocahontas	10	12.9	7.2
	Decatur	13	16.8	11.7	Ringgold	9	18.5	9.5
	Fremont	8	11.2	8.0	Taylor	*	*	*
	Howard	11	12.3	8.5	Van Buren	7	10.0	7.6
	Ida	*	*	*	Wayne	11	18.1	11.1
	Lucas	12	14.1	10.0	Worth	13	18.4	12.1
					Total	192	13.4	8.9
Counties with Average Population 10,000 – 20,000	Allamakee	13	9.9	6.5	Hardin	19	11.3	6.7
	Appanoose	12	9.8	6.3	Humboldt	10	10.8	7.6
	Butler	13	9.5	6.1	Iowa	28	19.8	13.8
	Calhoun	15	15.1	10.4	Jefferson	16	10.9	9.9
	Cass	14	10.6	6.2	Keokuk	16	15.6	10.0
	Cedar	21	12.9	9.7	Kossuth	22	14.4	11.1
	Cherokee	13	11.1	7.7	Louisa	9	8.2	7.2
	Chickasaw	16	13.6	9.2	Lyon	13	12.3	8.8
	Clay	22	14.1	10.2	Mitchell	14	14.3	8.3
	Clayton	14	8.3	5.6	Montgomery	19	18.1	10.0
	Crawford	10	6.6	4.7	O'Brien	18	13.3	7.7
	Delaware	15	9.1	8.0	Page	17	11.2	6.8
	Dickinson	19	12.9	8.9	Poweshiek	21	12.3	9.1
	Emmet	10	10.1	6.5	Sac	10	9.7	5.6
	Floyd	28	18.5	13.4	Shelby	16	13.6	8.3
	Franklin	9	9.3	6.1	Tama	12	7.4	5.1
	Greene	9	9.7	6.6	Union	17	15.4	10.0
	Hamilton	25	17.0	12.1	Winnebago	17	16.2	10.3
	Hancock	15	13.9	10.1	Wright	20	15.6	8.8
					Total	607	12.4	8.4
Counties with Average Population > 20,000	Boone	26	11.1	8.5	Lee	45	13.2	10.5
	Buchanan	21	11.1	9.7	Mahaska	15	7.5	5.8
	Buena Vista	23	12.6	9.8	Marion	25	8.7	7.1
	Carroll	31	16.1	11.6	Marshall	35	9.9	7.8
	Cerro Gordo	45	10.8	8.0	Muscatine	38	10.1	9.7
	Clinton	49	10.8	8.6	Plymouth	29	13.0	10.5
	Des Moines	47	12.4	10.0	Sioux	20	7.0	5.8
	Fayette	29	14.7	10.0	Wapello	38	11.7	8.9
	Henry	26	14.3	12.0	Webster	40	11.2	8.5
	Jackson	15	8.2	6.1	Winneshiek	17	8.9	7.4
	Jasper	34	10.2	8.4	Total	648	11.0	8.8
MSA Counties	Benton	22	9.6	7.6	Linn	142	8.3	8.3
	Black Hawk	104	9.1	8.3	Madison	11	8.7	8.0
	Bremer	23	10.9	8.5	Mills	5	3.8	3.9
	Dallas	27	7.2	8.2	Polk	285	8.4	9.2
	Dubuque	85	10.6	9.1	Pottawattamie	75	9.5	9.0
	Grundy	13	11.7	7.9	Scott	116	8.1	8.5
	Guthrie	9	8.8	5.5	Story	58	8.1	10.0
	Harrison	21	14.9	9.8	Warren	30	8.2	8.4
	Johnson	60	6.0	9.4	Washington	20	10.7	8.7
	Jones	24	13.1	10.9	Woodbury	92	9.9	9.3
					Total	1,222	8.7	8.8
	State Total	2,669	10.2	8.7				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Non-Hodgkin's Lymphoma Mortality by County Group 1978-2004



Leukemia Incidence 1996-2004

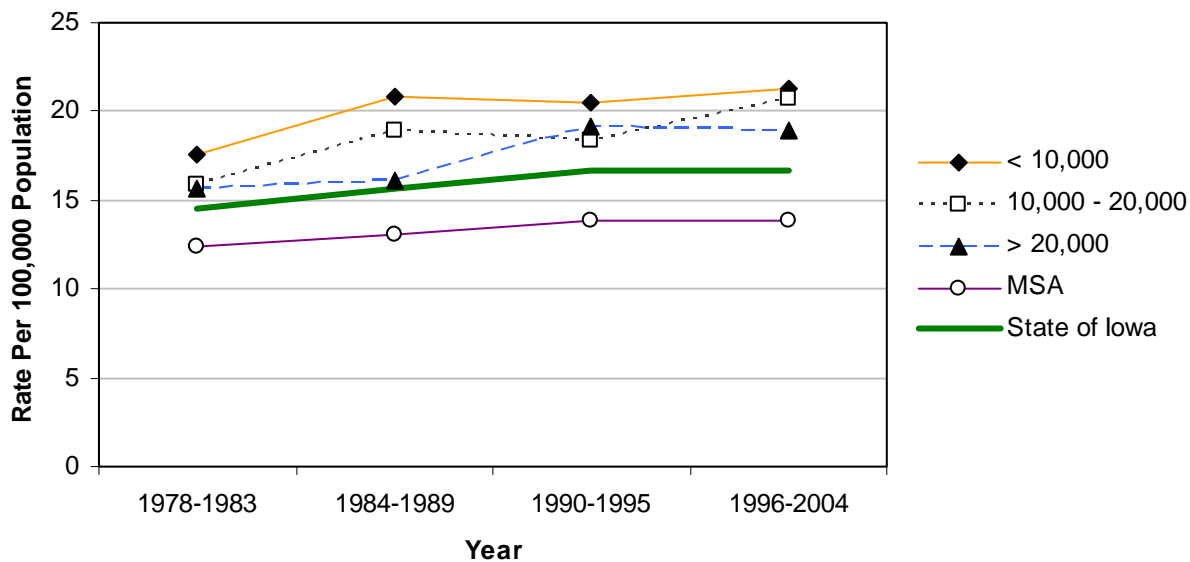
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	16	21.8	15.3	Monona	23	25.7	19.1
	Adams	*	*	*	Monroe	17	23.7	17.4
	Audubon	21	34.6	18.6	Osceola	9	14.3	12.0
	Clarke	13	16.0	12.4	Palo Alto	21	23.2	17.0
	Davis	12	15.6	12.5	Pocahontas	22	28.4	18.9
	Decatur	16	20.7	16.8	Ringgold	15	30.8	21.1
	Fremont	16	22.4	16.4	Taylor	13	20.9	13.4
	Howard	15	16.8	11.8	Van Buren	15	21.5	14.4
	Ida	24	34.3	24.1	Wayne	14	23.1	15.7
	Lucas	8	9.4	6.0	Worth	11	15.5	12.1
					Total	301-305	21.1-21.3	14.9-15.1
Counties with Average Population 10,000 – 20,000	Allamakee	23	17.5	13.7	Hardin	46	27.4	19.1
	Appanoose	18	14.6	9.9	Humboldt	23	24.8	16.5
	Butler	30	21.9	15.8	Iowa	23	16.3	11.9
	Calhoun	30	30.2	18.3	Jefferson	30	20.5	18.4
	Cass	19	14.4	8.8	Keokuk	17	16.6	11.3
	Cedar	41	25.1	20.0	Kossuth	34	22.2	16.4
	Cherokee	28	24.0	18.0	Louisa	20	18.3	17.2
	Chickasaw	14	11.9	8.7	Lyon	17	16.1	11.8
	Clay	36	23.1	16.6	Mitchell	22	22.5	16.8
	Clayton	30	17.9	13.9	Montgomery	15	14.3	9.8
	Crawford	32	21.0	16.8	O'Brien	36	26.6	19.4
	Delaware	27	16.4	14.5	Page	35	23.0	14.6
	Dickinson	24	16.3	11.1	Poweshiek	37	21.7	16.8
	Emmet	16	16.1	11.4	Sac	25	24.3	16.9
	Floyd	38	25.1	18.4	Shelby	30	25.5	18.8
	Franklin	13	13.4	10.4	Tama	33	20.4	15.3
	Greene	23	24.9	16.4	Union	16	14.5	10.6
	Hamilton	42	28.6	21.4	Winnebago	22	21.0	17.1
	Hancock	24	22.2	16.7	Wright	26	20.3	13.5
					Total	1,015	20.7	15.2
Counties with Average Population > 20,000	Boone	44	18.7	14.9	Lee	60	17.6	14.7
	Buchanan	36	19.0	17.3	Mahaska	30	15.0	12.6
	Buena Vista	38	20.8	18.7	Marion	58	20.1	17.6
	Carroll	34	17.7	13.0	Marshall	69	19.5	15.9
	Cerro Gordo	76	18.3	14.7	Muscatine	64	17.0	16.6
	Clinton	73	16.2	14.0	Plymouth	44	19.7	16.3
	Des Moines	95	25.1	20.6	Sioux	52	18.2	16.2
	Fayette	56	28.5	22.9	Wapello	61	18.8	14.8
	Henry	34	18.7	16.6	Webster	61	17.1	13.8
	Jackson	32	17.6	14.2	Winneshiek	29	15.2	14.0
	Jasper	63	18.9	15.4	Total	1,109	18.9	15.9
MSA Counties	Benton	41	17.9	15.4	Linn	223	13.0	13.1
	Black Hawk	153	13.4	12.5	Madison	20	15.8	14.2
	Bremer	26	12.4	9.8	Mills	19	14.6	14.1
	Dallas	65	17.4	18.9	Polk	407	12.0	12.9
	Dubuque	110	13.7	12.8	Pottawattamie	139	17.7	16.8
	Grundy	24	21.6	16.6	Scott	205	14.4	14.8
	Guthrie	25	24.4	17.1	Story	93	13.0	15.9
	Harrison	19	13.5	11.1	Warren	42	11.5	11.7
	Johnson	119	11.9	17.5	Washington	42	22.4	17.1
	Jones	29	15.8	13.8	Woodbury	156	16.7	16.2
					Total	1,957	13.9	14.1
	State Total	4,382-6	16.6-16.7	14.7-14.8				

¹Rates per 100,000 population²Adjusted to year 2000 population

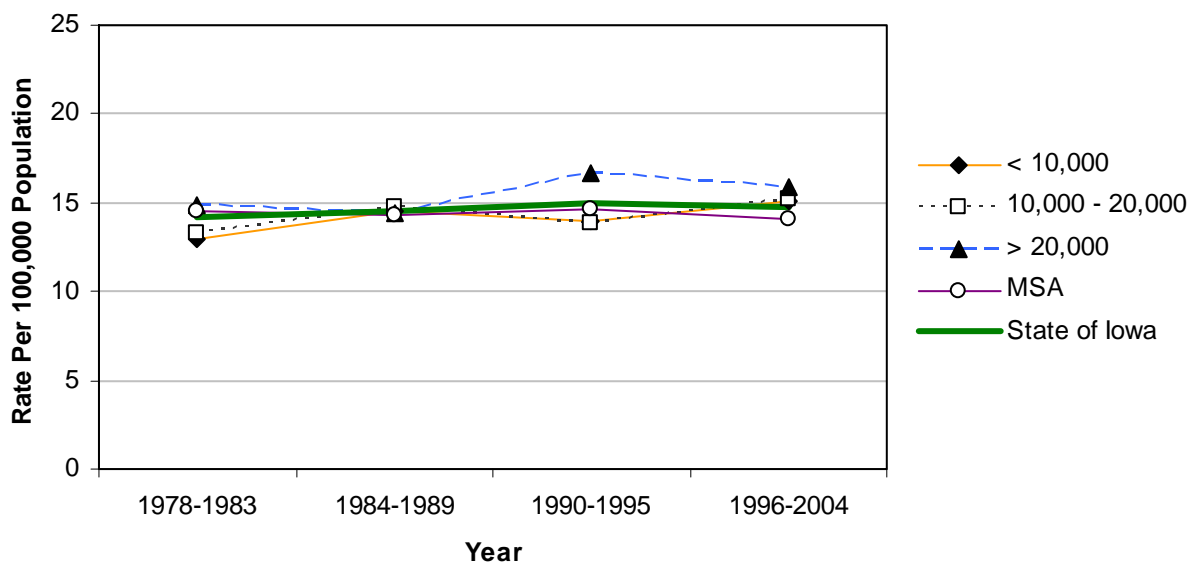
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Leukemia Incidence by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



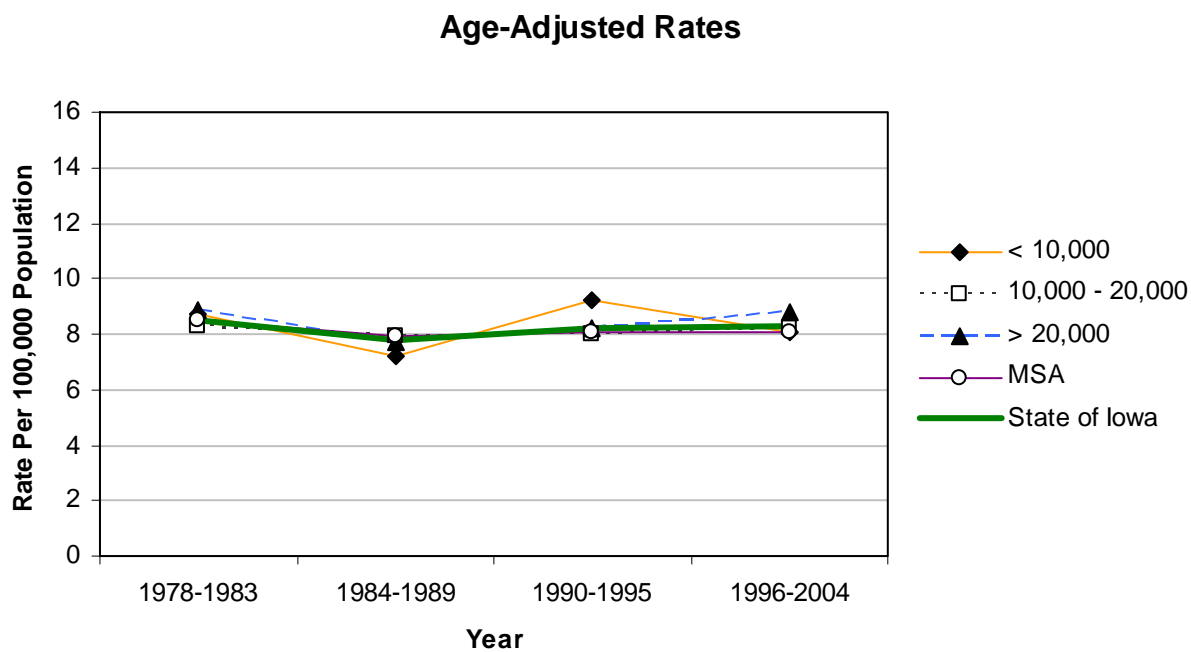
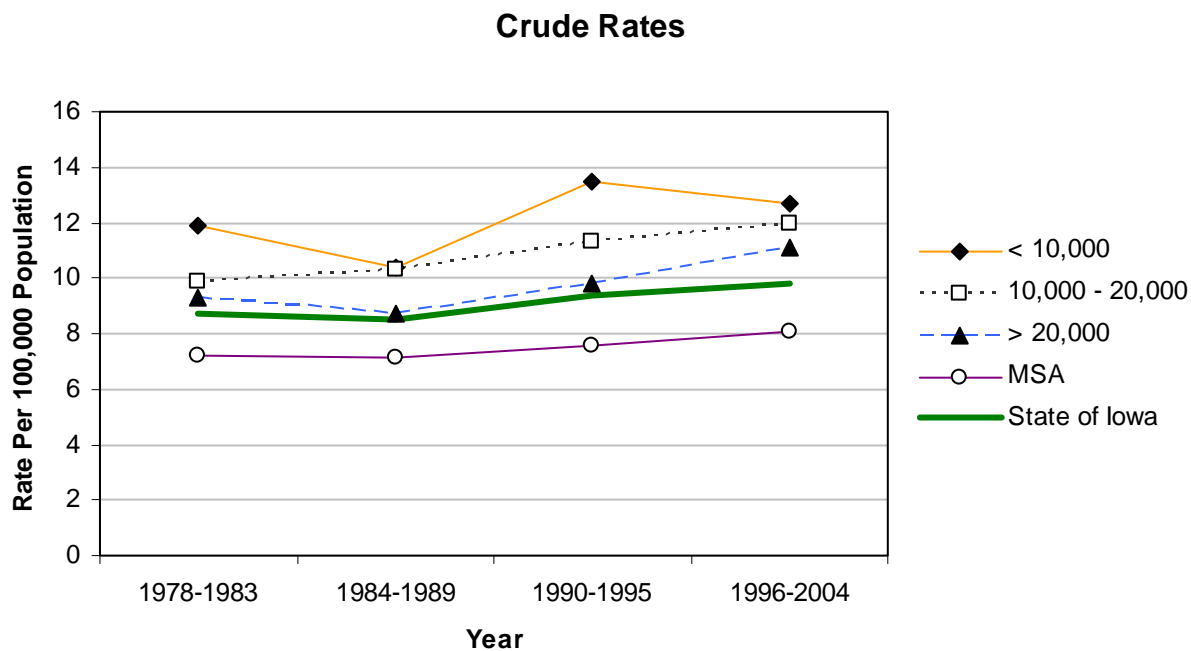
Leukemia Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	7	9.5	4.3	Monona	15	16.8	11.2
	Adams	*	*	*	Monroe	12	16.7	12.1
	Audubon	16	26.4	12.7	Osceola	7	11.1	9.5
	Clarke	8	9.9	6.7	Palo Alto	12	13.3	8.8
	Davis	8	10.4	7.7	Pocahontas	15	19.4	12.0
	Decatur	9	11.6	8.9	Ringgold	6	12.3	6.4
	Fremont	9	12.6	9.6	Taylor	10	16.1	9.8
	Howard	5	5.6	3.5	Van Buren	*	*	*
	Ida	11	15.7	9.1	Wayne	6	9.9	6.0
	Lucas	9	10.6	5.9	Worth	8	11.3	7.2
					Total	181	12.7	8.1
Counties with Average Population 10,000 – 20,000	Allamakee	12	9.2	6.1	Hardin	25	14.9	10.1
	Appanoose	7	5.7	3.8	Humboldt	19	20.5	13.0
	Butler	23	16.8	11.3	Iowa	10	7.1	4.9
	Calhoun	19	19.1	11.2	Jefferson	10	6.8	5.8
	Cass	14	10.6	6.5	Keokuk	10	9.8	7.1
	Cedar	26	15.9	11.5	Kossuth	27	17.6	11.4
	Cherokee	12	10.3	6.1	Louisa	14	12.8	10.8
	Chickasaw	11	9.4	6.6	Lyon	9	8.5	6.1
	Clay	14	9.0	6.2	Mitchell	10	10.2	5.9
	Clayton	18	10.7	7.3	Montgomery	14	13.4	8.2
	Crawford	17	11.2	8.3	O'Brien	22	16.2	11.4
	Delaware	16	9.7	8.6	Page	20	13.2	8.3
	Dickinson	24	16.3	10.8	Poweshiek	23	13.5	9.7
	Emmet	7	7.1	4.9	Sac	6	5.8	4.9
	Floyd	19	12.6	7.5	Shelby	14	11.9	8.1
	Franklin	5	5.2	3.2	Tama	21	13.0	9.2
	Greene	11	11.9	6.1	Union	13	11.8	7.9
	Hamilton	21	14.3	11.2	Winnebago	13	12.4	9.5
	Hancock	14	13.0	8.7	Wright	18	14.1	8.5
					Total	588	12.0	8.2
Counties with Average Population > 20,000	Boone	32	13.6	10.3	Lee	44	12.9	10.1
	Buchanan	20	10.6	9.1	Mahaska	19	9.5	7.3
	Buena Vista	20	10.9	9.0	Marion	38	13.2	11.1
	Carroll	18	9.4	6.5	Marshall	33	9.3	7.3
	Cerro Gordo	51	12.3	9.0	Muscatine	38	10.1	9.7
	Clinton	41	9.1	7.7	Plymouth	28	12.6	9.8
	Des Moines	52	13.7	10.2	Sioux	33	11.6	10.2
	Fayette	27	13.7	9.7	Wapello	37	11.4	8.6
	Henry	14	7.7	6.5	Webster	42	11.7	8.9
	Jackson	18	9.9	7.4	Winneshiek	14	7.3	5.9
	Jasper	35	10.5	8.5	Total	654	11.1	8.8
MSA Counties	Benton	28	12.2	10.1	Linn	134	7.8	7.8
	Black Hawk	98	8.6	7.9	Madison	12	9.5	8.2
	Bremer	16	7.6	5.6	Mills	9	6.9	6.9
	Dallas	38	10.2	10.9	Polk	252	7.5	8.1
	Dubuque	64	7.9	7.1	Pottawattamie	68	8.7	8.2
	Grundy	15	13.5	9.0	Scott	109	7.6	8.0
	Guthrie	10	9.8	6.4	Story	53	7.4	8.8
	Harrison	11	7.8	5.7	Warren	31	8.5	8.8
	Johnson	77	7.7	11.7	Washington	25	13.3	8.6
	Jones	11	6.0	4.8	Woodbury	79	8.5	7.9
					Total	1,140	8.1	8.1
	State Total	2,563	9.8	8.3				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Leukemia Mortality by County Group 1978-2004



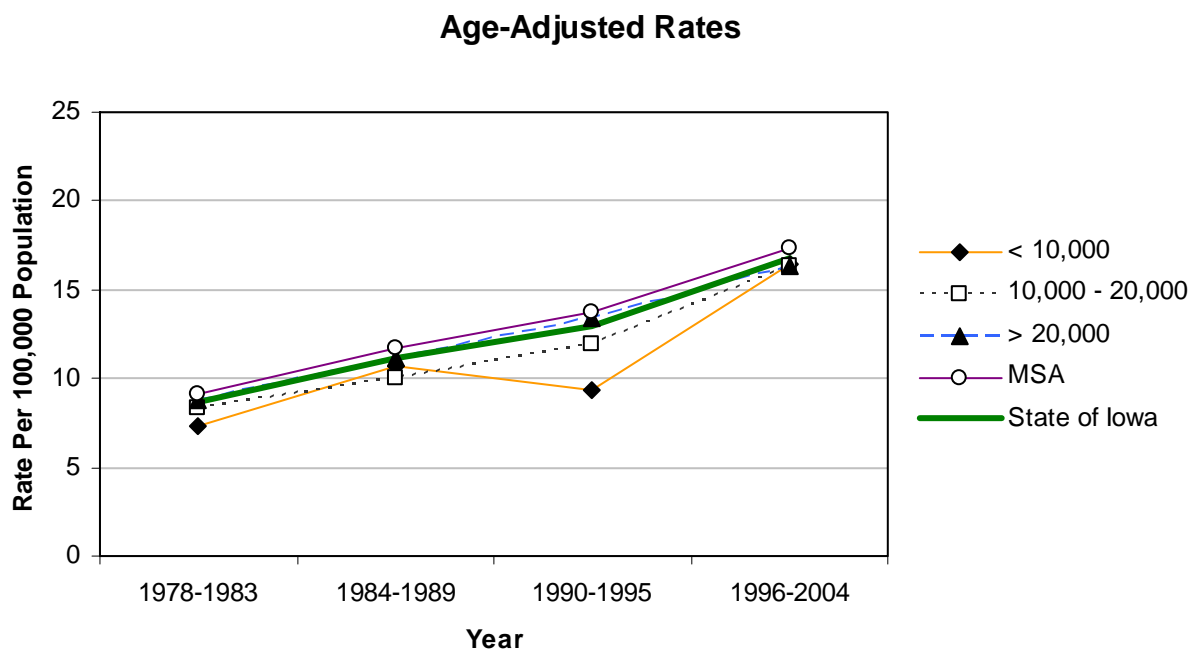
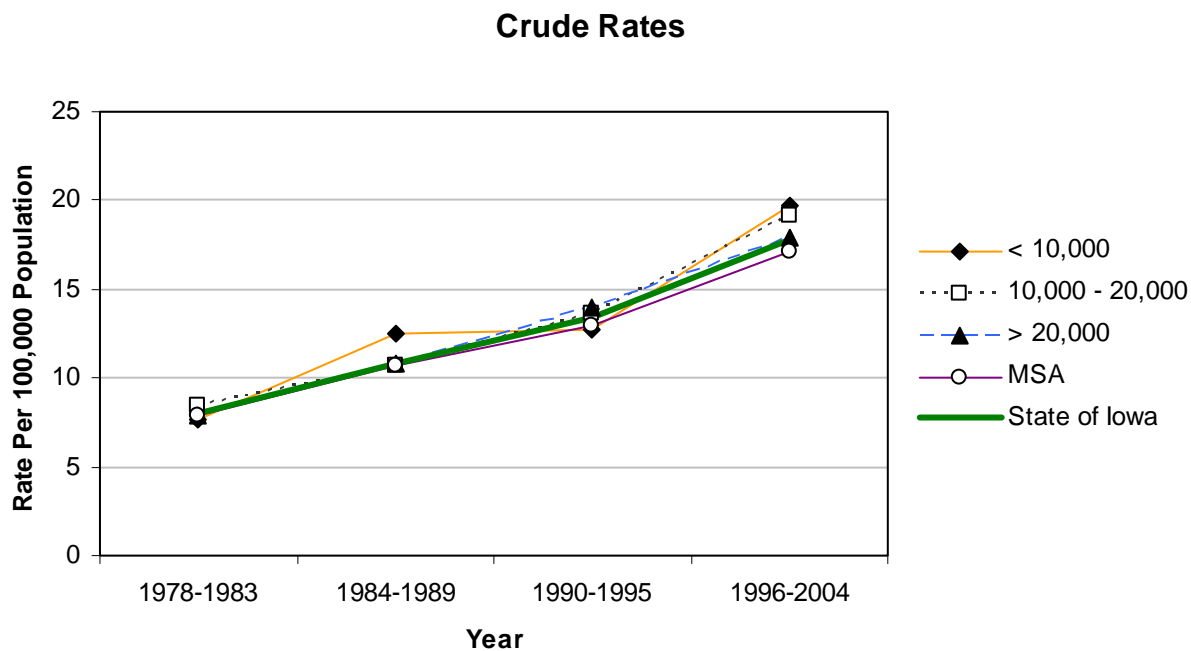
Skin Melanoma Incidence 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	11	15.0 (77)	11.9 (87)	Monona	19	21.3 (24)	17.5 (43)
	Adams	9	22.5 (18)	23.2 (06)	Monroe	17	23.7 (11)	20.3 (16)
	Audubon	11	18.1 (53)	13.0 (79)	Osceola	7	11.1 (98)	9.8 (94)
	Clarke	17	21.0 (28)	17.0 (46)	Palo Alto	15	16.6 (68)	14.5 (69)
	Davis	13	16.9 (67)	16.0 (55)	Pocahontas	9	11.6 (97)	8.1 (99)
	Decatur	17	22.0 (21)	19.0 (26)	Ringgold	6	12.3 (93)	9.4 (97)
	Fremont	13	18.2 (50)	14.7 (67)	Taylor	11	17.7 (58)	16.2 (52)
	Howard	25	28.0 (03)	25.8 (02)	Van Buren	16	22.9 (15)	19.2 (25)
	Ida	19	27.1 (05)	23.2 (06)	Wayne	11	18.1 (53)	16.2 (52)
	Lucas	21	24.7 (09)	19.4 (22)	Worth	14	19.8 (36)	15.1 (64)
					Total	281	19.7	16.4
Counties with Average Population 10,000 – 20,000	Allamakee	25	19.1 (44)	16.0 (55)	Hardin	37	22.0 (21)	17.6 (40)
	Appanoose	25	20.3 (30)	15.0 (65)	Humboldt	12	12.9 (91)	8.8 (98)
	Butler	32	23.3 (12)	19.4 (22)	Iowa	28	19.8 (36)	18.1 (36)
	Calhoun	17	17.1 (65)	13.5 (75)	Jefferson	21	14.4 (82)	12.9 (80)
	Cass	23	17.5 (61)	14.5 (69)	Keokuk	17	16.6 (68)	14.8 (66)
	Cedar	38	23.3 (12)	21.4 (12)	Kossuth	31	20.2 (33)	18.3 (34)
	Cherokee	26	22.3 (19)	16.4 (51)	Louisa	25	22.9 (15)	22.5 (09)
	Chickasaw	20	17.0 (66)	15.6 (58)	Lyon	21	19.8 (36)	17.9 (38)
	Clay	22	14.1 (83)	12.2 (84)	Mitchell	27	27.6 (04)	20.9 (13)
	Clayton	32	19.1 (44)	15.4 (61)	Montgomery	14	13.4 (87)	11.1 (91)
	Crawford	20	13.1 (89)	11.9 (87)	O'Brien	20	14.8 (79)	12.4 (83)
	Delaware	31	18.8 (47)	18.4 (31)	Page	38	25.0 (08)	18.8 (28)
	Dickinson	43	29.3 (02)	24.6 (03)	Poweshiek	25	14.7 (80)	12.6 (81)
	Emmet	12	12.1 (95)	9.5 (96)	Sac	23	22.3 (19)	18.4 (31)
	Floyd	41	27.1 (05)	22.6 (08)	Shelby	19	16.1 (74)	14.0 (73)
	Franklin	16	16.5 (72)	14.7 (67)	Tama	30	18.5 (49)	17.4 (44)
	Greene	24	26.0 (07)	21.5 (11)	Union	13	11.8 (96)	9.7 (95)
	Hamilton	31	21.1 (27)	18.8 (28)	Winnebago	19	18.1 (53)	17.1 (45)
	Hancock	25	23.2 (14)	20.1 (17)	Wright	21	16.4 (73)	11.7 (89)
					Total	944	19.2	16.3
Counties with Average Population > 20,000	Boone	49	20.8 (29)	19.0 (26)	Lee	62	18.2 (50)	16.1 (54)
	Buchanan	46	24.3 (10)	24.1 (04)	Mahaska	29	14.5 (81)	13.3 (77)
	Buena Vista	24	13.1 (89)	12.1 (85)	Marion	48	16.6 (68)	15.3 (63)
	Carroll	35	18.2 (50)	16.6 (49)	Marshall	67	19.0 (46)	17.0 (46)
	Cerro Gordo	91	21.9 (23)	19.5 (20)	Muscatine	59	15.7 (75)	15.4 (61)
	Clinton	90	19.9 (35)	18.4 (31)	Plymouth	30	13.5 (85)	12.5 (82)
	Des Moines	59	15.6 (76)	13.3 (77)	Sioux	58	20.3 (30)	19.9 (19)
	Fayette	37	18.8 (47)	15.7 (57)	Wapello	69	21.3 (24)	19.4 (22)
	Henry	37	20.3 (30)	18.2 (35)	Webster	44	12.3 (93)	10.8 (92)
	Jackson	36	19.8 (36)	17.6 (40)	Winneshiek	24	12.6 (92)	11.4 (90)
	Jasper	58	17.4 (62)	15.5 (59)	Total	1,052	17.9	16.3
MSA Counties	Benton	38	16.6 (68)	15.5 (59)	Linn	344	20.0 (34)	20.0 (18)
	Black Hawk	219	19.2 (43)	18.8 (28)	Madison	19	15.0 (77)	14.5 (69)
	Bremer	48	22.8 (17)	20.6 (15)	Mills	14	10.7 (99)	10.4 (93)
	Dallas	73	19.5 (41)	20.7 (14)	Polk	446	13.2 (88)	13.7 (74)
	Dubuque	140	17.4 (62)	17.0 (46)	Pottawattamie	110	14.0 (84)	13.5 (75)
	Grundy	40	36.0 (01)	29.7 (01)	Scott	256	17.9 (57)	18.1 (36)
	Guthrie	20	19.6 (40)	16.6 (49)	Story	138	19.4 (42)	23.9 (05)
	Harrison	19	13.5 (85)	12.0 (86)	Warren	64	17.4 (62)	17.6 (40)
	Johnson	181	18.1 (53)	21.9 (10)	Washington	33	17.6 (60)	14.3 (72)
	Jones	39	21.3 (24)	19.5 (20)	Woodbury	165	17.7 (58)	17.8 (39)
					Total	2,406	17.1	17.3
	State Total	4,683	17.8	16.8				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Skin Melanoma Incidence by County Group 1978-2004



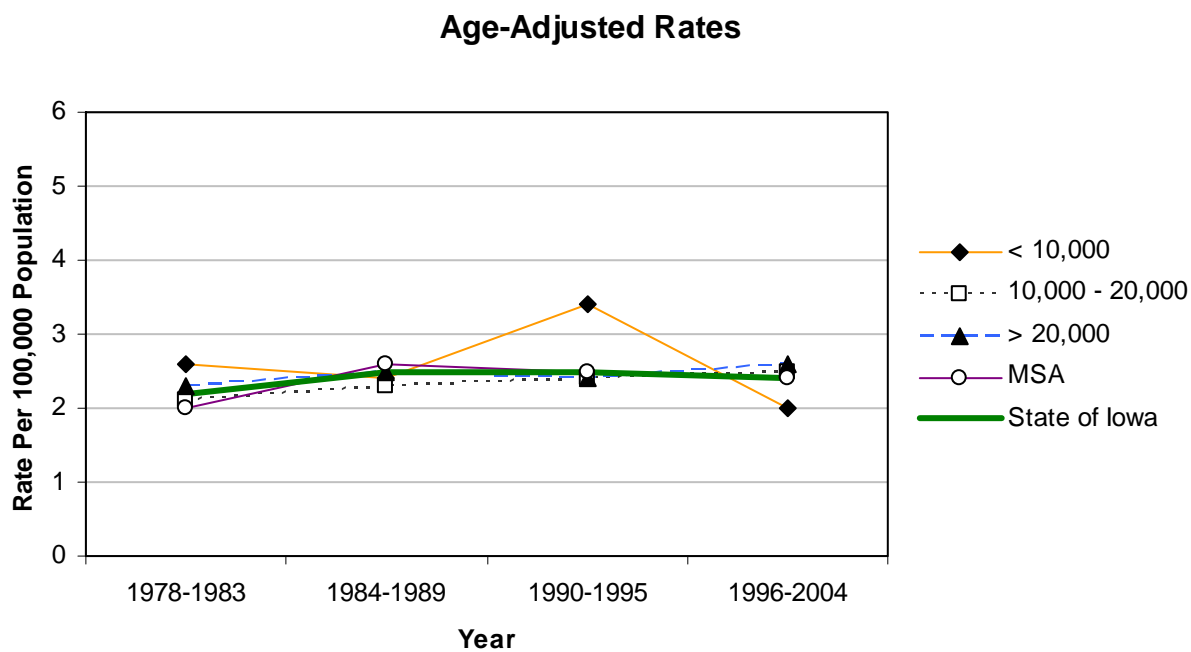
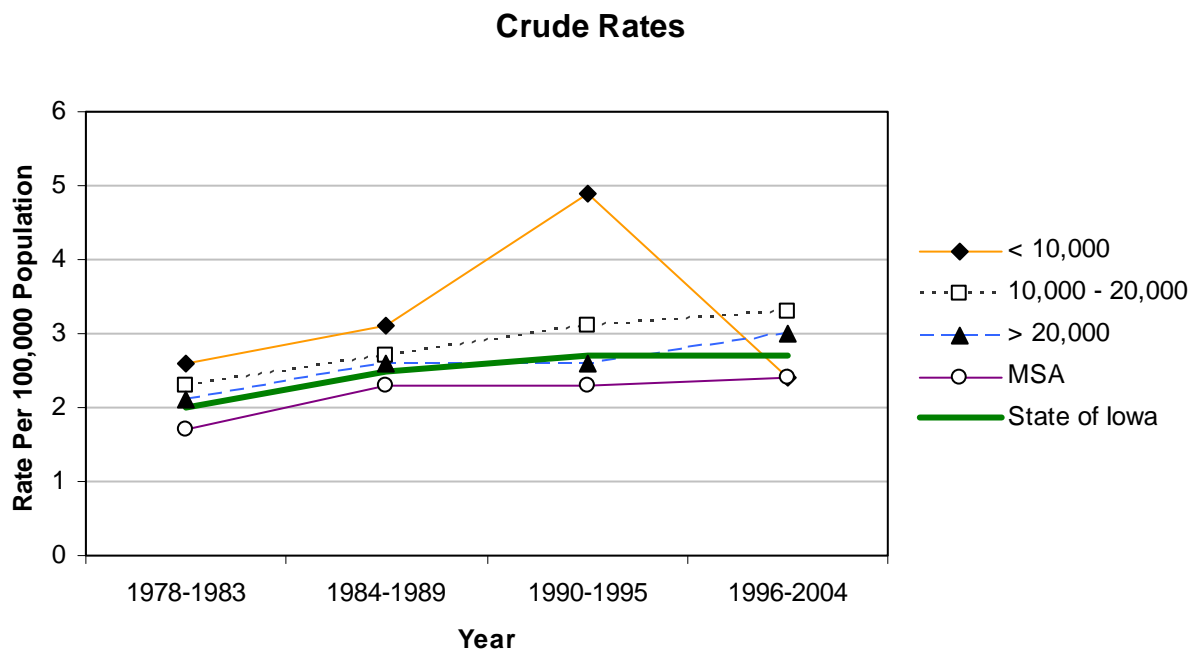
Skin Melanoma Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	35	2.4	2.0
Counties with Average Population 10,000 – 20,000	Allamakee	7	5.3	4.0	Hardin	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	6	4.3	3.2
	Calhoun	5	5.0	4.0	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	9	5.5	4.3	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	5	4.7	4.5
	Clay	7	4.5	3.6	Mitchell	*	*	*
	Clayton	*	*	*	Montgomery	*	*	*
	Crawford	*	*	*	O'Brien	6	4.4	2.8
	Delaware	7	4.2	4.2	Page	*	*	*
	Dickinson	6	4.1	2.8	Poweshiek	10	5.9	5.3
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	7	5.9	5.1
	Franklin	*	*	*	Tama	6	3.7	3.0
	Greene	5	5.4	4.1	Union	7	6.4	4.7
	Hamilton	*	*	*	Winnebago	*	*	*
	Hancock	6	5.6	3.8	Wright	6	4.7	2.9
					Total	161	3.3	2.5
Counties with Average Population > 20,000	Boone	7	3.0	2.7	Lee	12	3.5	2.8
	Buchanan	9	4.8	4.4	Mahaska	*	*	*
	Buena Vista	5	2.7	2.6	Marion	10	3.5	3.1
	Carroll	*	*	*	Marshall	18	5.1	4.5
	Cerro Gordo	5	1.2	1.0	Muscatine	9	2.4	2.3
	Clinton	13	2.9	2.7	Plymouth	8	3.6	3.1
	Des Moines	20	5.3	4.2	Sioux	10	3.5	3.4
	Fayette	8	4.1	3.0	Wapello	8	2.5	2.0
	Henry	*	*	*	Webster	12	3.4	2.9
	Jackson	*	*	*	Winneshiek	*	*	*
	Jasper	8	2.4	2.1	Total	176	3.0	2.6
MSA Counties	Benton	10	4.4	3.7	Linn	36	2.1	2.1
	Black Hawk	24	2.1	2.0	Madison	*	*	*
	Bremer	6	2.9	2.7	Mills	*	*	*
	Dallas	6	1.6	1.6	Polk	87	2.6	2.7
	Dubuque	20	2.5	2.3	Pottawattamie	20	2.5	2.4
	Grundy	7	6.3	4.7	Scott	37	2.6	2.6
	Guthrie	*	*	*	Story	9	1.3	1.5
	Harrison	8	5.7	5.2	Warren	11	3.0	3.1
	Johnson	22	2.2	3.1	Washington	*	*	*
	Jones	*	*	*	Woodbury	15	1.6	1.6
					Total	335	2.4	2.4
	State Total	707	2.7	2.4				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Skin Melanoma Mortality by County Group 1978-2004



Oral Cavity (Excluding Lip) Cancer Incidence 1996-2004

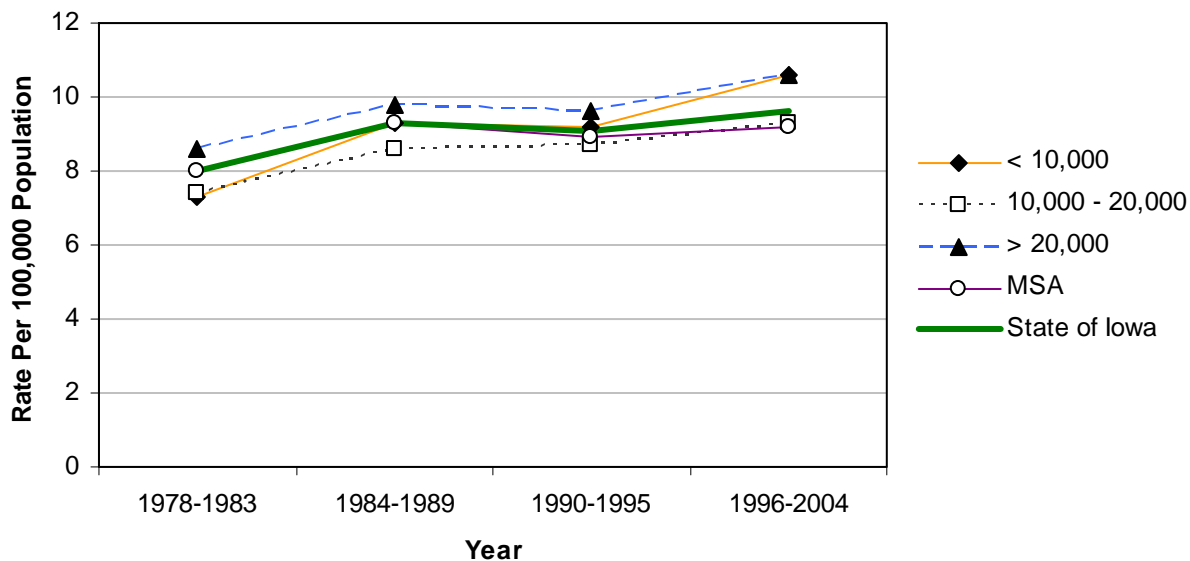
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	7	9.5	7.7	Monona	13	14.5	10.9
	Adams	6	15.0	11.7	Monroe	11	15.3	12.5
	Audubon	6	9.9	7.0	Osceola	7	11.1	9.2
	Clarke	12	14.8	12.1	Palo Alto	6	6.6	5.2
	Davis	*	*	*	Pocahontas	7	9.1	7.1
	Decatur	8	10.4	8.8	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	8	12.9	8.6
	Howard	11	12.3	11.6	Van Buren	*	*	*
	Ida	7	10.0	7.5	Wayne	12	19.8	17.0
	Lucas	8	9.4	8.1	Worth	8	11.3	8.2
					Total	151	10.6	8.3
Counties with Average Population 10,000 – 20,000	Allamakee	16	12.2	10.5	Hardin	20	11.9	8.8
	Appanoose	10	8.1	6.6	Humboldt	9	9.7	7.3
	Butler	11	8.0	6.1	Iowa	6	4.3	3.7
	Calhoun	9	9.1	6.8	Jefferson	14	9.6	8.9
	Cass	15	11.4	8.1	Keokuk	10	9.8	7.7
	Cedar	16	9.8	9.3	Kossuth	16	10.4	7.3
	Cherokee	14	12.0	9.2	Louisa	6	5.5	5.3
	Chickasaw	7	6.0	5.7	Lyon	10	9.4	7.8
	Clay	12	7.7	6.9	Mitchell	*	*	*
	Clayton	23	13.7	11.3	Montgomery	13	12.4	10.1
	Crawford	17	11.2	9.6	O'Brien	15	11.1	7.8
	Delaware	8	4.9	4.7	Page	11	7.2	5.3
	Dickinson	9	6.1	4.0	Poweshiek	11	6.5	5.6
	Emmet	9	9.1	8.3	Sac	12	11.7	8.9
	Floyd	12	7.9	6.2	Shelby	10	8.5	6.4
	Franklin	8	8.2	6.2	Tama	19	11.7	9.4
	Greene	13	14.1	10.3	Union	15	13.6	10.5
	Hamilton	10	6.8	6.4	Winnebago	9	8.6	5.4
	Hancock	11	10.2	8.3	Wright	14	10.9	7.7
					Total	450-4	9.2-9.3	7.3-7.4
Counties with Average Population > 20,000	Boone	27	11.5	10.3	Lee	52	15.3	12.4
	Buchanan	20	10.6	9.5	Mahaska	18	9.0	7.8
	Buena Vista	15	8.2	7.8	Marion	33	11.4	10.6
	Carroll	20	10.4	8.1	Marshall	36	10.2	8.3
	Cerro Gordo	52	12.5	10.1	Muscatine	27	7.2	7.0
	Clinton	59	13.1	11.2	Plymouth	24	10.8	9.7
	Des Moines	41	10.8	9.3	Sioux	21	7.4	7.3
	Fayette	21	10.7	8.2	Wapello	42	13.0	10.9
	Henry	15	8.2	7.5	Webster	37	10.3	9.4
	Jackson	19	10.4	8.3	Winneshiek	17	8.9	8.1
	Jasper	26	7.8	6.7	Total	622	10.6	9.2
MSA Counties	Benton	15	6.5	6.2	Linn	171	9.9	10.0
	Black Hawk	122	10.7	10.3	Madison	12	9.5	8.9
	Bremer	22	10.5	8.4	Mills	9	6.9	6.4
	Dallas	32	8.6	9.3	Polk	304	9.0	9.7
	Dubuque	82	10.2	9.2	Pottawattamie	67	8.5	8.1
	Grundy	19	17.1	14.2	Scott	141	9.9	10.0
	Guthrie	14	13.7	11.2	Story	45	6.3	7.9
	Harrison	18	12.8	10.8	Warren	27	7.4	7.4
	Johnson	75	7.5	10.4	Washington	21	11.2	9.8
	Jones	17	9.3	8.2	Woodbury	83	8.9	9.0
					Total	1,296	9.2	9.4
	State Total	2,519-23	9.5-9.6	8.7-8.8				

¹Rates per 100,000 population²Adjusted to year 2000 population

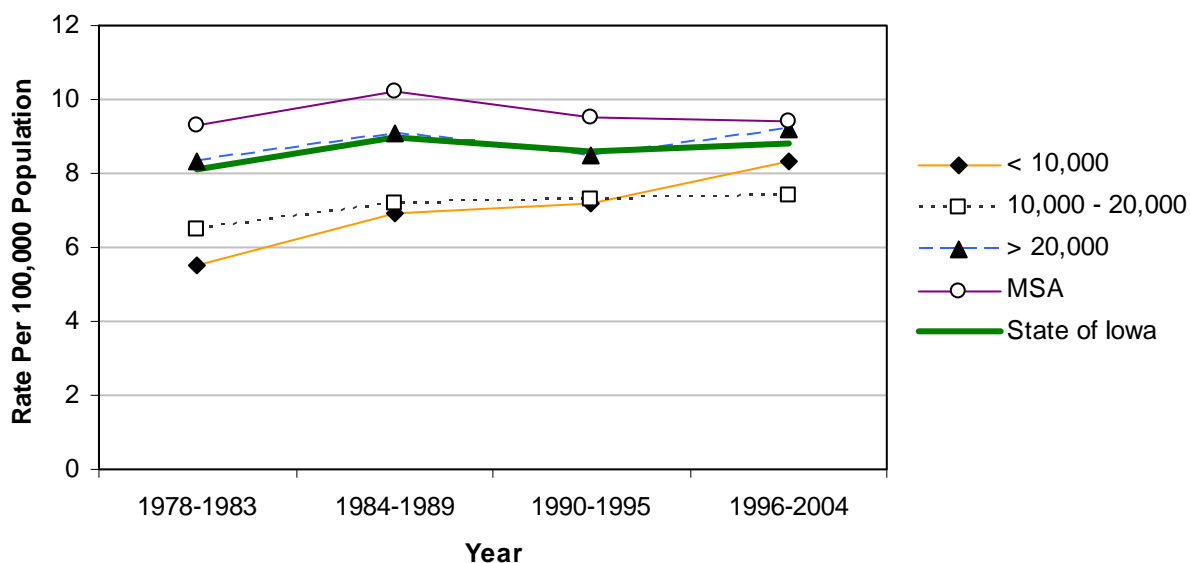
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Oral Cavity (Excluding Lip) Cancer Incidence by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



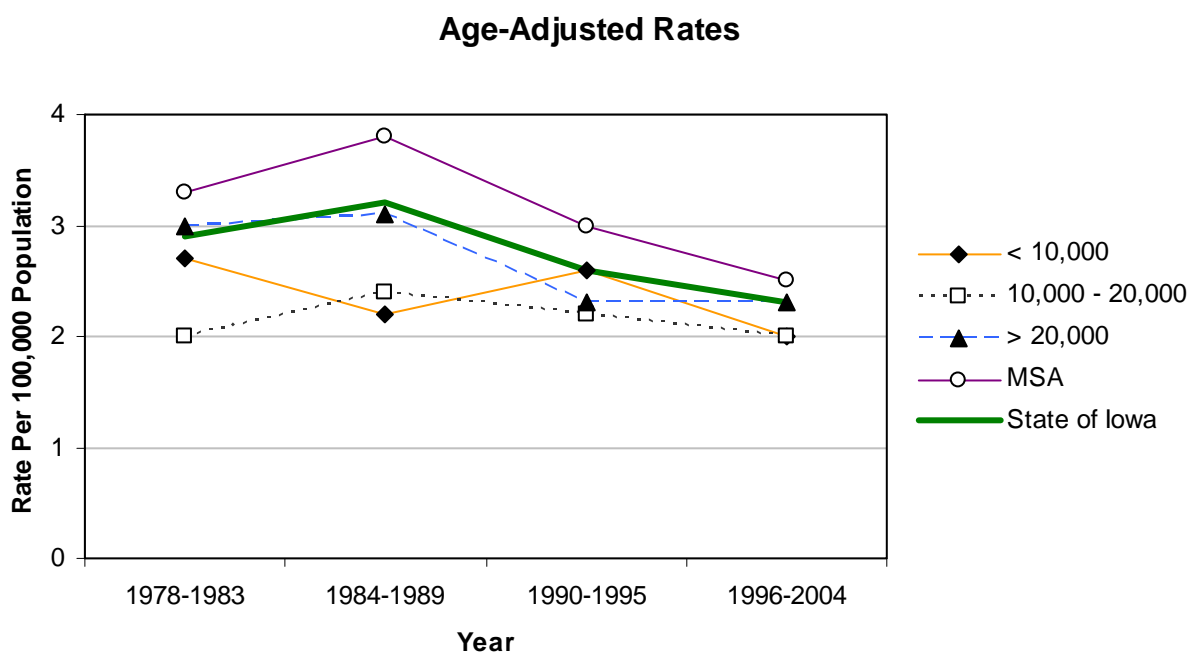
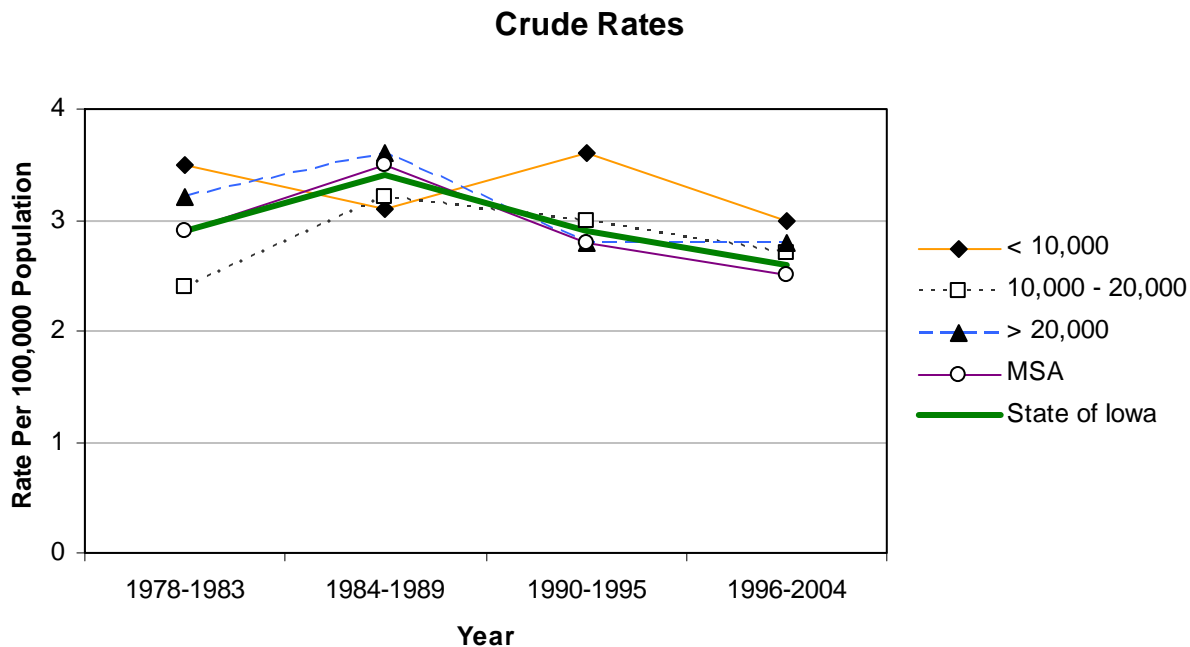
Oral Cavity (Excluding Lip) Cancer Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	5	5.6	3.7
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	5	5.6	4.1	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	43	3.0	2.0
Counties with Average Population 10,000 – 20,000	Allamakee	6	4.6	3.0	Hardin	7	4.2	2.6
	Appanoose	7	5.7	5.3	Humboldt	*	*	*
	Butler	5	3.6	2.5	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	8	5.2	3.8
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Mitchell	*	*	*
	Clayton	6	3.6	2.8	Montgomery	*	*	*
	Crawford	8	5.3	4.2	O'Brien	*	*	*
	Delaware	*	*	*	Page	*	*	*
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	9	8.7	5.6
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	5	5.2	3.6	Tama	*	*	*
	Greene	5	5.4	3.1	Union	*	*	*
	Hamilton	*	*	*	Winnebago	*	*	*
	Hancock	*	*	*	Wright	*	*	*
					Total	134	2.7	2.0
Counties with Average Population > 20,000	Boone	*	*	*	Lee	10	2.9	2.3
	Buchanan	5	2.6	2.3	Mahaska	*	*	*
	Buena Vista	*	*	*	Marion	7	2.4	2.1
	Carroll	7	3.6	2.3	Marshall	11	3.1	2.4
	Cerro Gordo	19	4.6	3.5	Muscatine	5	1.3	1.3
	Clinton	16	3.5	2.8	Plymouth	5	2.2	1.7
	Des Moines	11	2.9	2.4	Sioux	*	*	*
	Fayette	*	*	*	Wapello	13	4.0	3.2
	Henry	6	3.3	3.1	Webster	15	4.2	3.3
	Jackson	*	*	*	Winneshiek	7	3.7	3.3
	Jasper	9	2.7	2.3	Total	162	2.8	2.3
MSA Counties	Benton	*	*	*	Linn	36	2.1	2.1
	Black Hawk	30	2.6	2.4	Madison	5	3.9	3.6
	Bremer	*	*	*	Mills	*	*	*
	Dallas	9	2.4	2.7	Polk	85	2.5	2.8
	Dubuque	25	3.1	2.7	Pottawattamie	18	2.3	2.2
	Grundy	8	7.2	5.9	Scott	40	2.8	2.9
	Guthrie	*	*	*	Story	11	1.5	1.9
	Harrison	7	5.0	4.2	Warren	7	1.9	2.0
	Johnson	17	1.7	2.6	Washington	8	4.3	3.6
	Jones	*	*	*	Woodbury	31	3.3	3.3
					Total	348	2.5	2.5
	State Total	687	2.6	2.3				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Oral Cavity (Excluding Lip) Cancer Mortality by County Group 1978-2004



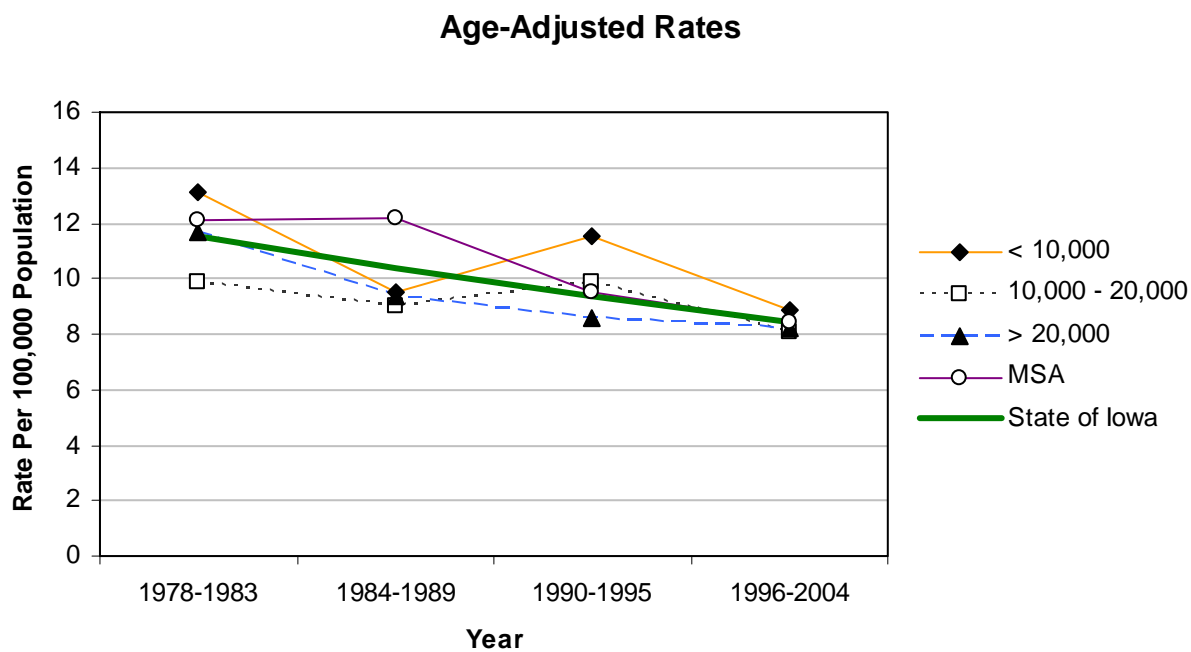
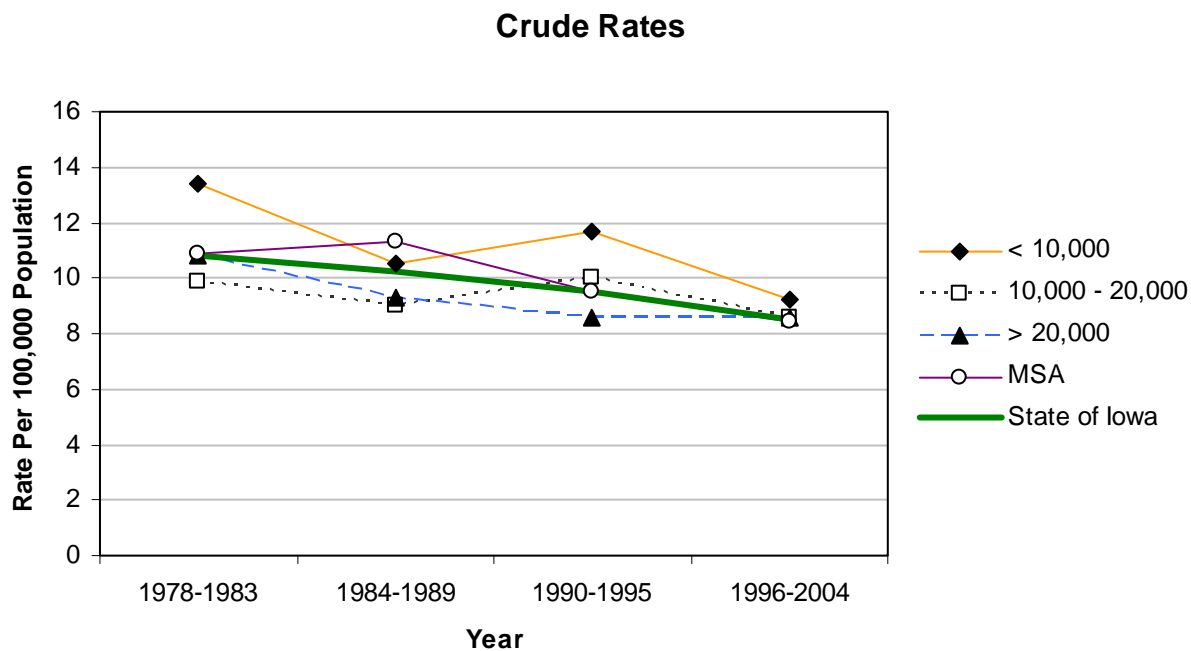
Cervical Cancer Incidence 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	6	14.5	15.8	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	5	13.7	15.0	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	5	11.4	11.3	Worth	7	19.6	18.3
					Total	67	9.2	8.9
Counties with Average Population 10,000 – 20,000	Allamakee	5	7.6	7.1	Hardin	10	11.7	12.4
	Appanoose	7	10.9	10.0	Humboldt	*	*	*
	Butler	*	*	*	Iowa	5	6.9	5.9
	Calhoun	*	*	*	Jefferson	9	12.1	12.1
	Cass	5	7.4	10.1	Keokuk	6	11.4	10.7
	Cedar	8	9.7	9.2	Kossuth	*	*	*
	Cherokee	5	8.4	7.7	Louisa	*	*	*
	Chickasaw	8	13.6	12.9	Lyon	*	*	*
	Clay	9	11.2	8.3	Mitchell	*	*	*
	Clayton	7	8.3	8.4	Montgomery	*	*	*
	Crawford	11	14.5	15.1	O'Brien	9	13.0	14.8
	Delaware	*	*	*	Page	13	17.4	15.2
	Dickinson	6	8.0	7.7	Poweshiek	10	11.3	10.6
	Emmet	5	9.8	8.6	Sac	8	15.2	16.2
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	*	*	*	Tama	5	6.1	6.6
	Greene	*	*	*	Union	7	12.2	11.4
	Hamilton	6	8.1	8.4	Winnebago	*	*	*
	Hancock	5	9.1	8.5	Wright	7	10.7	11.2
					Total	214	8.6	8.1
Counties with Average Population > 20,000	Boone	12	10.0	10.1	Lee	10	5.8	6.1
	Buchanan	11	11.5	11.5	Mahaska	14	13.9	14.7
	Buena Vista	11	12.0	12.6	Marion	6	4.1	4.2
	Carroll	10	10.1	8.7	Marshall	17	9.5	8.1
	Cerro Gordo	22	10.2	9.6	Muscatine	28	14.8	14.8
	Clinton	17	7.3	7.5	Plymouth	*	*	*
	Des Moines	13	6.6	5.8	Sioux	7	4.8	5.0
	Fayette	9	9.0	7.7	Wapello	19	11.4	9.7
	Henry	8	8.9	8.7	Webster	17	9.5	7.8
	Jackson	6	6.5	6.6	Winneshiek	6	6.2	6.3
	Jasper	9	5.4	5.6	Total	252-6	8.4-8.6	8.0-8.2
MSA Counties	Benton	12	10.4	11.0	Linn	77	8.8	8.6
	Black Hawk	47	7.9	8.3	Madison	7	10.9	10.2
	Bremer	*	*	*	Mills	6	9.2	8.6
	Dallas	15	7.9	7.7	Polk	157	9.0	8.8
	Dubuque	30	7.3	7.4	Pottawattamie	41	10.2	10.1
	Grundy	*	*	*	Scott	68	9.3	9.1
	Guthrie	7	13.5	16.7	Story	26	7.5	8.6
	Harrison	6	8.4	7.9	Warren	11	5.8	5.7
	Johnson	28	5.6	6.4	Washington	7	7.2	6.5
	Jones	*	*	*	Woodbury	48	10.1	10.4
					Total	602	8.4	8.4
State Total		1,135-9	8.4-8.5	8.3-8.4				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Cervical Cancer Incidence by County Group 1978-2004



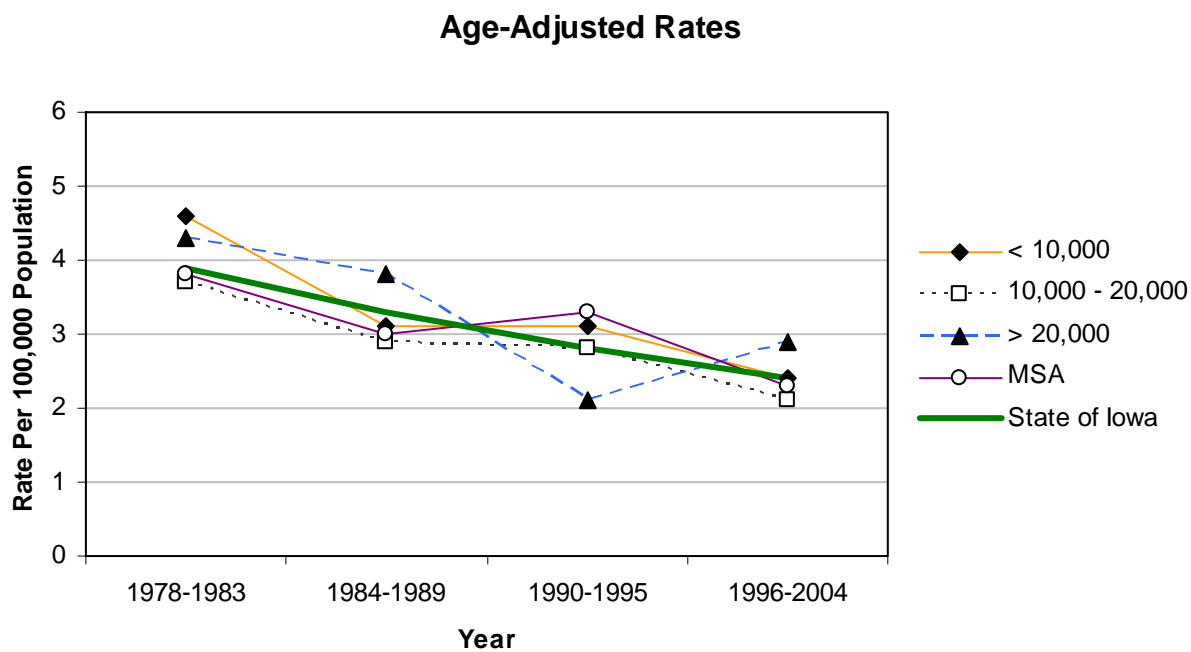
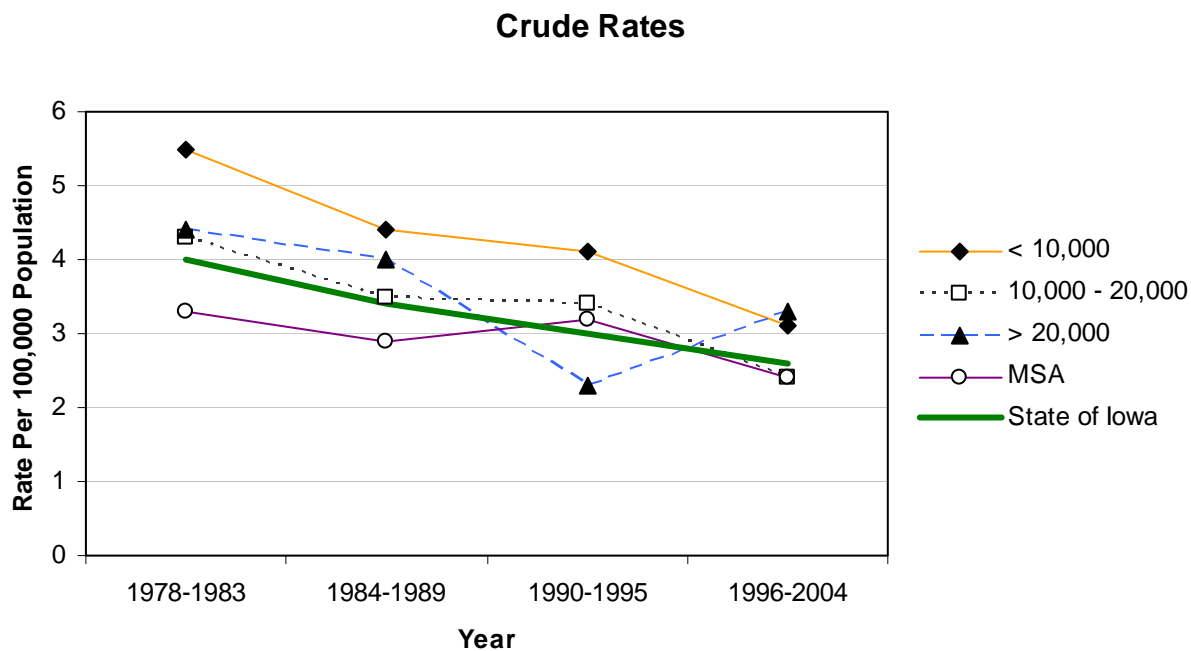
Cervical Cancer Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	23	3.1	2.4
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	6	8.0	7.2
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Mitchell	*	*	*
	Clayton	*	*	*	Montgomery	*	*	*
	Crawford	*	*	*	O'Brien	*	*	*
	Delaware	*	*	*	Page	*	*	*
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	*	*	*	Tama	*	*	*
	Greene	*	*	*	Union	*	*	*
	Hamilton	*	*	*	Winnebago	*	*	*
	Hancock	*	*	*	Wright	5	7.7	6.1
					Total	60	2.4	2.1
Counties with Average Population > 20,000	Boone	6	5.0	4.9	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	9	8.9	8.8
	Buena Vista	5	5.5	3.5	Marion	*	*	*
	Carroll	*	*	*	Marshall	5	2.8	2.2
	Cerro Gordo	11	5.1	4.2	Muscatine	9	4.7	4.3
	Clinton	*	*	*	Plymouth	*	*	*
	Des Moines	7	3.6	3.4	Sioux	*	*	*
	Fayette	*	*	*	Wapello	10	6.0	4.5
	Henry	*	*	*	Webster	5	2.8	2.1
	Jackson	*	*	*	Winneshiek	*	*	*
	Jasper	*	*	*	Total	99	3.3	2.9
MSA Counties	Benton	*	*	*	Linn	21	2.4	2.3
	Black Hawk	19	3.2	3.1	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	39	2.2	2.3
	Dubuque	7	1.7	1.5	Pottawattamie	12	3.0	2.8
	Grundy	*	*	*	Scott	26	3.6	3.3
	Guthrie	*	*	*	Story	6	1.7	2.0
	Harrison	*	*	*	Warren	*	*	*
	Johnson	8	1.6	2.2	Washington	*	*	*
	Jones	*	*	*	Woodbury	15	3.2	2.8
					Total	171	2.4	2.3
	State Total	353	2.6	2.4				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Cervical Cancer Mortality by County Group 1978-2004



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Injury Mortality

Transportation-related mortality accounted for 4,371 deaths in Iowa from 1996 to 2004, 91% of which were motor vehicle fatalities. The rates for these fatalities are highest in the rural counties and lowest in the most urban counties. Rates for suicide and firearm mortality are also highest in the most rural counties. Falls mortality tends to be highest in rural counties, but the age-adjusted rates are more similar for the county groups. Homicide rates are consistently higher in the urban counties. Poisoning mortality rates have shown variation across years for each county group. The state's mortality rate from burns has decreased since 1979. In general, drowning deaths have consistently decreased across all county levels since 1979. Deaths from all other unintentional injuries are difficult to compare for 1999-2004 and preceding years due to changes in the mortality classification systems (discussed below).

HIGHLIGHTS...

- ✓ Injuries are the leading cause of death in persons 1-34 years of age.
- ✓ Motor vehicle deaths account for 91% of all transportation deaths in Iowa.
- ✓ Crude mortality rates from motor vehicle accidents, suicide, firearms, and falls are highest in rural counties.

Beginning in 1999, the tenth revision of the International Classification of Diseases (ICD-10) replaced the ninth version (ICD-9) as the standard mortality classification system. ICD-10 is more detailed than ICD-9; ICD-10 has about 8,000 categories while ICD-9 has about 5,000 categories. Also, some of the coding rules and rules for selecting the underlying cause of death have changed. Because of the new classification system, observed changes in mortality rates between 1999 and 2004 and preceding years could be due, in part, to changes in the method of mortality classification. Therefore, one should compare rates from 1999-2004 and preceding years with caution. The ICD-9 and ICD-10 codes used for each type of Injury Mortality are listed in Appendix III.

The source of this mortality data is the cause of death data obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa and the Center for Public Health Statistics at the University of Iowa. Age-adjusted rates were calculated using the Year 2000 U.S. population distribution.

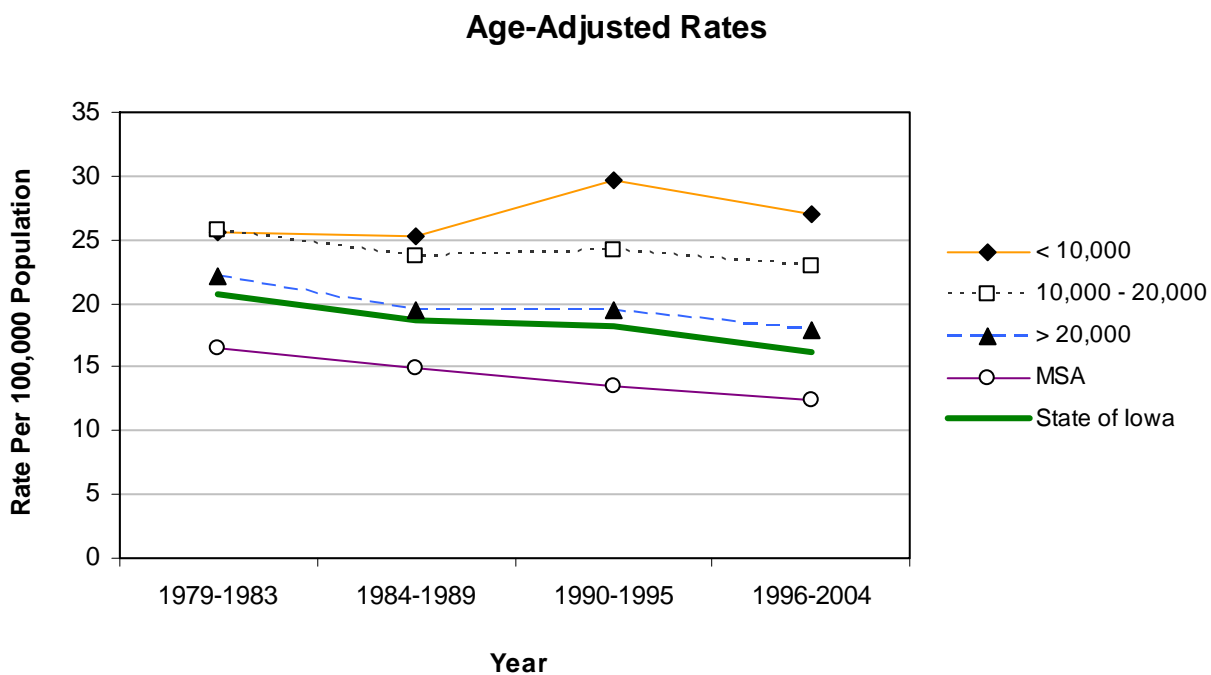
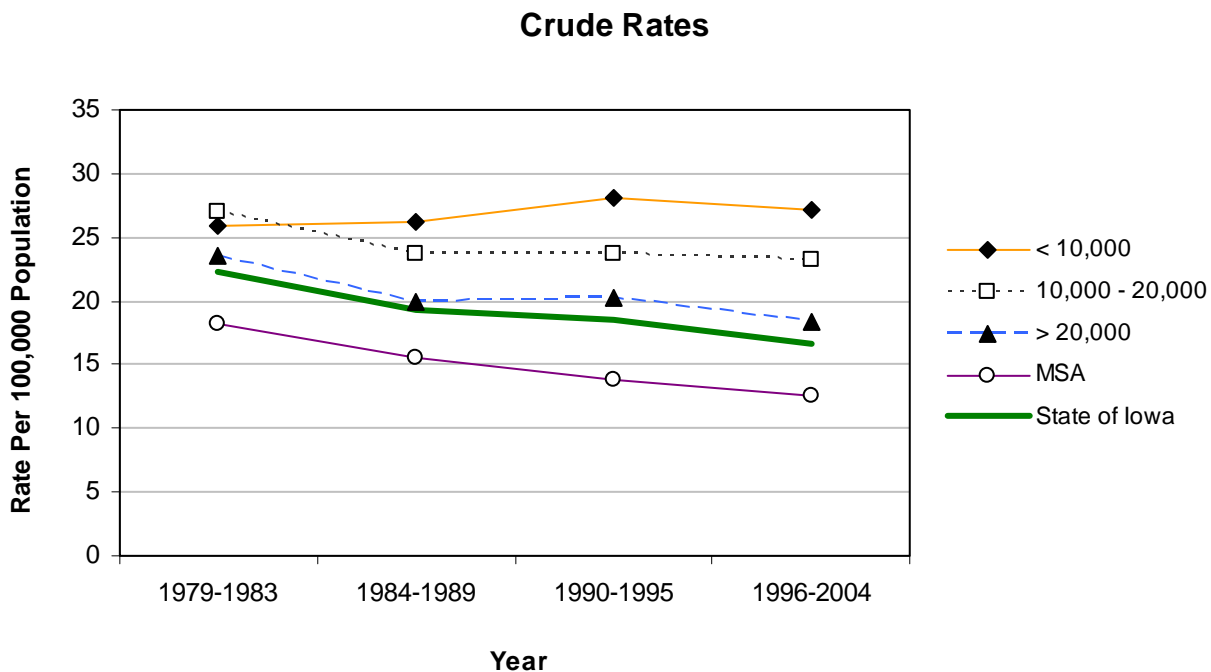
All Transportation Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	24	32.7 (08)	32.5 (08)	Monona	31	34.7 (05)	37.3 (02)
	Adams	12	30.0 (12)	28.9 (11)	Monroe	21	29.2 (14)	31.2 (10)
	Audubon	14	23.1 (38)	19.4 (57)	Osceola	14	22.3 (42)	23.9 (31)
	Clarke	17	21.0 (51)	23.3 (33)	Palo Alto	21	23.2 (37)	22.8 (40)
	Davis	28	36.4 (03)	35.0 (05)	Pocahontas	19	24.6 (29)	22.5 (42)
	Decatur	23	29.8 (13)	26.7 (20)	Ringgold	6	12.3 (92)	9.0 (98)
	Fremont	15	21.0 (50)	21.2 (46)	Taylor	16	25.8 (25)	28.0 (14)
	Howard	14	15.7 (81)	16.5 (75)	Van Buren	25	35.8 (04)	37.0 (04)
	Ida	18	25.7 (26)	26.9 (19)	Wayne	29	47.8 (01)	51.0 (01)
	Lucas	27	31.8 (10)	28.7 (12)	Worth	14	19.8 (57)	19.0 (59)
					Total	388	27.2	27.0
Counties with Average Population 10,000 – 20,000	Allamakee	30	22.9 (40)	24.3 (29)	Hardin	30	17.8 (68)	16.9 (72)
	Appanoose	27	22.0 (43)	23.3 (35)	Humboldt	18	19.4 (59)	20.6 (49)
	Butler	24	17.5 (70)	18.2 (64)	Iowa	35	24.8 (28)	26.4 (22)
	Calhoun	16	16.1 (77)	17.1 (69)	Jefferson	30	20.5 (53)	20.5 (50)
	Cass	32	24.3 (31)	26.2 (23)	Keokuk	39	38.1 (02)	37.3 (03)
	Cedar	41	25.1 (27)	24.3 (30)	Kossuth	35	22.9 (41)	22.8 (39)
	Cherokee	31	26.6 (21)	26.1 (25)	Louisa	30	27.4 (17)	27.4 (15)
	Chickasaw	40	34.1 (06)	34.0 (06)	Lyon	18	17.0 (73)	15.4 (81)
	Clay	19	12.2 (93)	12.1 (92)	Mitchell	28	28.6 (15)	26.0 (27)
	Clayton	51	30.4 (11)	31.9 (09)	Montgomery	21	20.0 (54)	20.4 (52)
	Crawford	40	26.3 (22)	25.6 (28)	O'Brien	23	17.0 (74)	17.4 (68)
	Delaware	35	21.2 (49)	20.3 (53)	Page	33	21.7 (47)	19.7 (56)
	Dickinson	32	21.8 (44)	20.4 (51)	Poweshiek	41	24.1 (32)	22.1 (43)
	Emmet	27	27.3 (19)	26.1 (24)	Sac	33	32.0 (09)	28.4 (13)
	Floyd	29	19.2 (61)	18.8 (62)	Shelby	18	15.3 (83)	15.7 (78)
	Franklin	25	25.8 (24)	23.1 (38)	Tama	53	32.8 (07)	33.8 (07)
	Greene	14	15.2 (84)	14.0 (85)	Union	27	24.5 (30)	26.4 (21)
	Hamilton	32	21.8 (45)	21.4 (45)	Winnebago	29	27.7 (16)	27.3 (16)
	Hancock	17	15.8 (80)	15.1 (83)	Wright	35	27.3 (18)	27.0 (18)
					Total	1,138	23.2	22.9
Counties with Average Population > 20,000	Boone	49	20.8 (52)	21.2 (47)	Lee	74	21.7 (46)	21.5 (44)
	Buchanan	44	23.3 (36)	23.1 (37)	Mahaska	32	16.0 (78)	15.9 (77)
	Buena Vista	31	16.9 (75)	15.4 (80)	Marion	50	17.3 (71)	16.4 (76)
	Carroll	41	21.3 (48)	21.0 (48)	Marshall	53	15.0 (85)	15.1 (82)
	Cerro Gordo	71	17.1 (72)	17.0 (70)	Muscatine	66	17.6 (69)	17.6 (67)
	Clinton	89	19.7 (58)	19.2 (58)	Plymouth	42	18.8 (64)	19.9 (54)
	Des Moines	52	13.7 (87)	13.3 (91)	Sioux	57	20.0 (55)	18.1 (65)
	Fayette	46	23.4 (35)	22.6 (41)	Wapello	60	18.5 (66)	18.8 (61)
	Henry	36	19.8 (56)	18.8 (63)	Webster	55	15.4 (82)	14.6 (84)
	Jackson	43	23.6 (33)	23.7 (32)	Winneshiek	36	18.8 (63)	16.7 (74)
	Jasper	53	15.9 (79)	15.5 (79)	Total	1,080	18.4	17.9
MSA Counties	Benton	31	13.5 (88)	13.5 (88)	Linn	175	10.2 (98)	10.2 (97)
	Black Hawk	158	13.8 (86)	13.5 (87)	Madison	24	18.9 (62)	19.7 (55)
	Bremer	38	18.1 (67)	17.0 (71)	Mills	30	23.0 (39)	23.1 (36)
	Dallas	61	16.3 (76)	16.7 (73)	Polk	397	11.7 (94)	11.9 (93)
	Dubuque	87	10.8 (97)	10.4 (96)	Pottawattamie	106	13.5 (89)	13.5 (89)
	Grundy	29	26.1 (23)	27.2 (17)	Scott	157	11.0 (96)	11.0 (94)
	Guthrie	19	18.6 (65)	17.7 (66)	Story	92	12.9 (91)	13.7 (86)
	Harrison	33	23.5 (34)	23.3 (34)	Warren	41	11.2 (95)	10.9 (95)
	Johnson	77	7.7 (99)	7.6 (99)	Washington	36	19.2 (60)	19.0 (60)
	Jones	49	26.7 (20)	26.0 (26)	Woodbury	125	13.4 (90)	13.3 (90)
					Total	1,765	12.5	12.3
	State Total	4,371	16.6	16.1				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population³Rank among 99 counties

Source: State Health Registry of Iowa

All Transportation Mortality by County Group 1979-2004



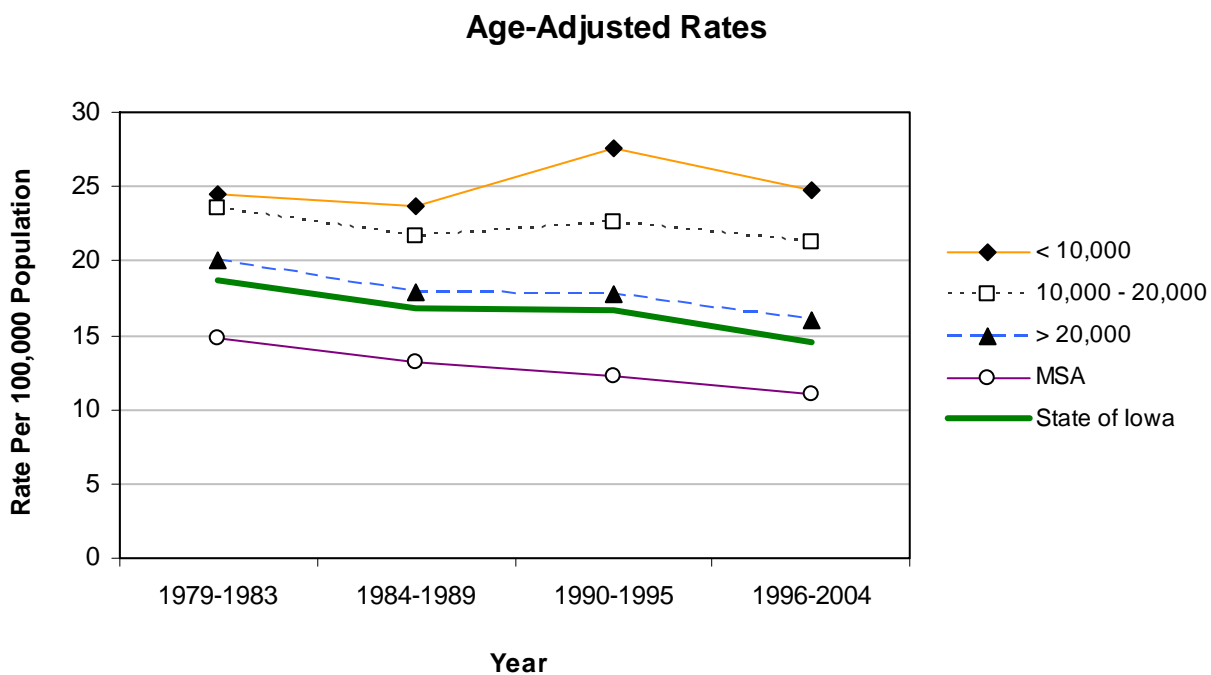
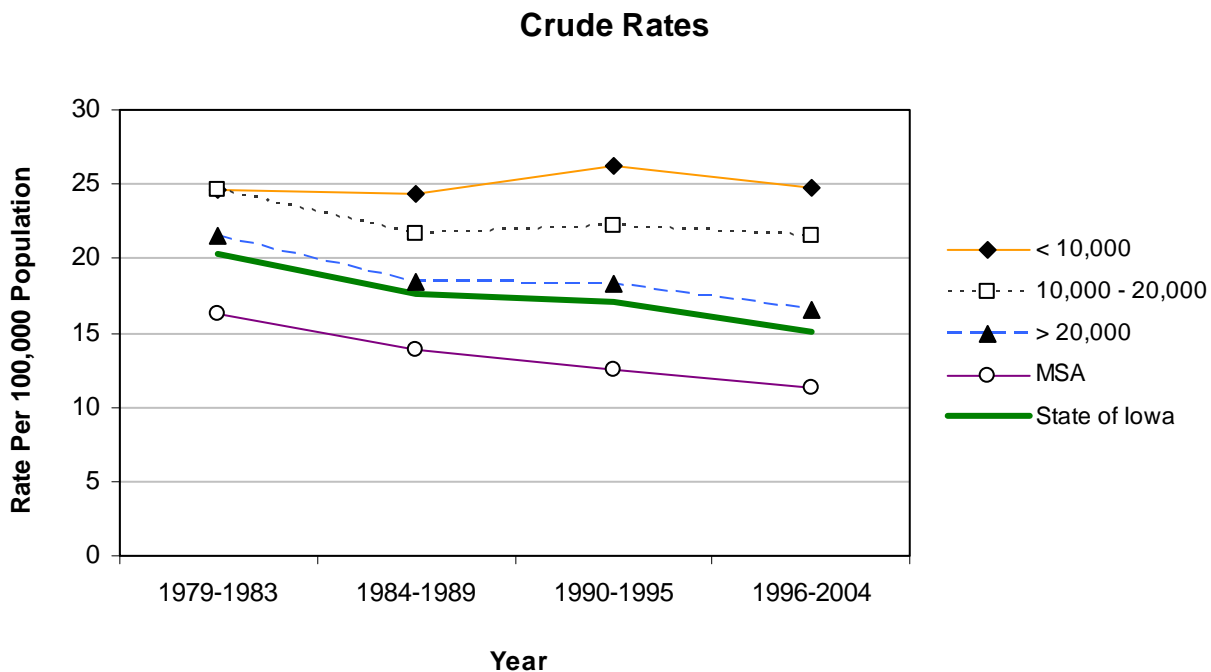
Motor Vehicle Traffic Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	23	31.3 (07)	31.1 (07)	Monona	29	32.4 (06)	35.7 (03)
	Adams	10	25.0 (17)	24.5 (20)	Monroe	17	23.7 (24)	25.2 (16)
	Audubon	12	19.8 (50)	18.0 (56)	Osceola	14	22.3 (29)	23.9 (22)
	Clarke	17	21.0 (39)	23.3 (28)	Palo Alto	18	19.9 (47)	20.1 (43)
	Davis	26	33.8 (03)	32.2 (06)	Pocahontas	18	23.3 (26)	21.0 (39)
	Decatur	22	28.5 (11)	25.7 (14)	Ringgold	6	12.3 (88)	9.0 (97)
	Fremont	14	19.6 (52)	19.9 (47)	Taylor	15	24.1 (20)	26.5 (12)
	Howard	13	14.6 (80)	14.9 (73)	Van Buren	23	32.9 (05)	33.4 (04)
	Ida	15	21.4 (37)	23.6 (27)	Wayne	26	42.8 (01)	46.2 (01)
	Lucas	22	25.9 (14)	24.7 (19)	Worth	13	18.4 (58)	17.6 (58)
					Total	353	24.7	24.8
Counties with Average Population 10,000 – 20,000	Allamakee	29	22.1 (33)	23.7 (24)	Hardin	28	16.7 (66)	15.5 (67)
	Appanoose	26	21.2 (38)	22.7 (31)	Humboldt	16	17.2 (63)	17.4 (59)
	Butler	21	15.3 (72)	16.6 (65)	Iowa	32	22.7 (27)	24.5 (21)
	Calhoun	15	15.1 (74)	16.0 (66)	Jefferson	29	19.8 (48)	20.0 (46)
	Cass	29	22.0 (35)	23.7 (25)	Keokuk	38	37.1 (02)	36.8 (02)
	Cedar	39	23.9 (22)	23.0 (30)	Kossuth	34	22.2 (31)	21.9 (34)
	Cherokee	28	24.0 (21)	23.9 (23)	Louisa	26	23.8 (23)	23.7 (26)
	Chickasaw	39	33.2 (04)	33.3 (05)	Lyon	18	17.0 (64)	15.4 (68)
	Clay	18	11.5 (92)	11.4 (91)	Mitchell	25	25.5 (16)	23.1 (29)
	Clayton	48	28.6 (10)	30.0 (09)	Montgomery	21	20.0 (46)	20.4 (41)
	Crawford	33	21.7 (36)	21.8 (36)	O'Brien	20	14.8 (79)	15.3 (70)
	Delaware	34	20.6 (42)	19.7 (48)	Page	30	19.7 (51)	17.8 (57)
	Dickinson	30	20.4 (43)	18.6 (53)	Poweshiek	38	22.3 (28)	20.9 (40)
	Emmet	22	22.2 (32)	21.7 (37)	Sac	31	30.1 (08)	27.1 (11)
	Floyd	28	18.5 (57)	18.0 (55)	Shelby	16	13.6 (83)	14.2 (79)
	Franklin	24	24.7 (19)	22.0 (33)	Tama	47	29.0 (09)	30.2 (08)
	Greene	13	14.1 (82)	12.9 (84)	Union	26	23.6 (25)	25.5 (15)
	Hamilton	30	20.4 (44)	20.1 (45)	Winnebago	28	26.7 (12)	26.4 (13)
	Hancock	16	14.8 (78)	14.2 (80)	Wright	32	25.0 (18)	24.7 (18)
					Total	1,057	21.5	21.3
Counties with Average Population > 20,000	Boone	44	18.7 (55)	19.0 (50)	Lee	59	17.3 (60)	17.3 (62)
	Buchanan	36	19.0 (53)	18.8 (52)	Mahaska	30	15.0 (75)	14.9 (74)
	Buena Vista	30	16.4 (68)	14.9 (72)	Marion	47	16.3 (69)	15.3 (71)
	Carroll	39	20.3 (45)	20.2 (42)	Marshall	45	12.7 (86)	12.9 (85)
	Cerro Gordo	62	14.9 (77)	14.7 (77)	Muscatine	65	17.3 (61)	17.3 (60)
	Clinton	78	17.3 (62)	16.8 (64)	Plymouth	40	17.9 (59)	19.1 (49)
	Des Moines	43	11.4 (93)	10.9 (92)	Sioux	54	18.9 (54)	17.0 (63)
	Fayette	41	20.8 (41)	20.1 (44)	Wapello	49	15.1 (73)	15.3 (69)
	Henry	36	19.8 (49)	18.8 (51)	Webster	51	14.3 (81)	13.4 (83)
	Jackson	38	20.9 (40)	21.2 (38)	Winneshiek	32	16.7 (65)	14.8 (75)
	Jasper	50	15.0 (76)	14.8 (76)	Total	969	16.5	16.0
MSA Counties	Benton	29	12.7 (87)	12.6 (88)	Linn	155	9.0 (97)	9.0 (96)
	Black Hawk	149	13.0 (85)	12.8 (86)	Madison	21	16.6 (67)	17.3 (61)
	Bremer	33	15.7 (70)	14.6 (78)	Mills	29	22.2 (30)	22.5 (32)
	Dallas	50	13.4 (84)	13.7 (82)	Polk	356	10.5 (94)	10.7 (93)
	Dubuque	67	8.3 (98)	8.1 (98)	Pottawattamie	93	11.8 (91)	11.8 (90)
	Grundy	29	26.1 (13)	27.2 (10)	Scott	140	9.8 (96)	9.8 (95)
	Guthrie	16	15.6 (71)	13.9 (81)	Story	85	11.9 (90)	12.7 (87)
	Harrison	31	22.1 (34)	21.8 (35)	Warren	38	10.4 (95)	10.1 (94)
	Johnson	70	7.0 (99)	7.0 (99)	Washington	35	18.7 (56)	18.6 (54)
	Jones	47	25.6 (15)	24.8 (17)	Woodbury	113	12.1 (89)	12.0 (89)
					Total	1,586	11.3	11.1
	State Total	3,965	15.1	14.6				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population³Rank among 99 counties

Source: State Health Registry of Iowa

Motor Vehicle Traffic Mortality by County Group 1979-2004



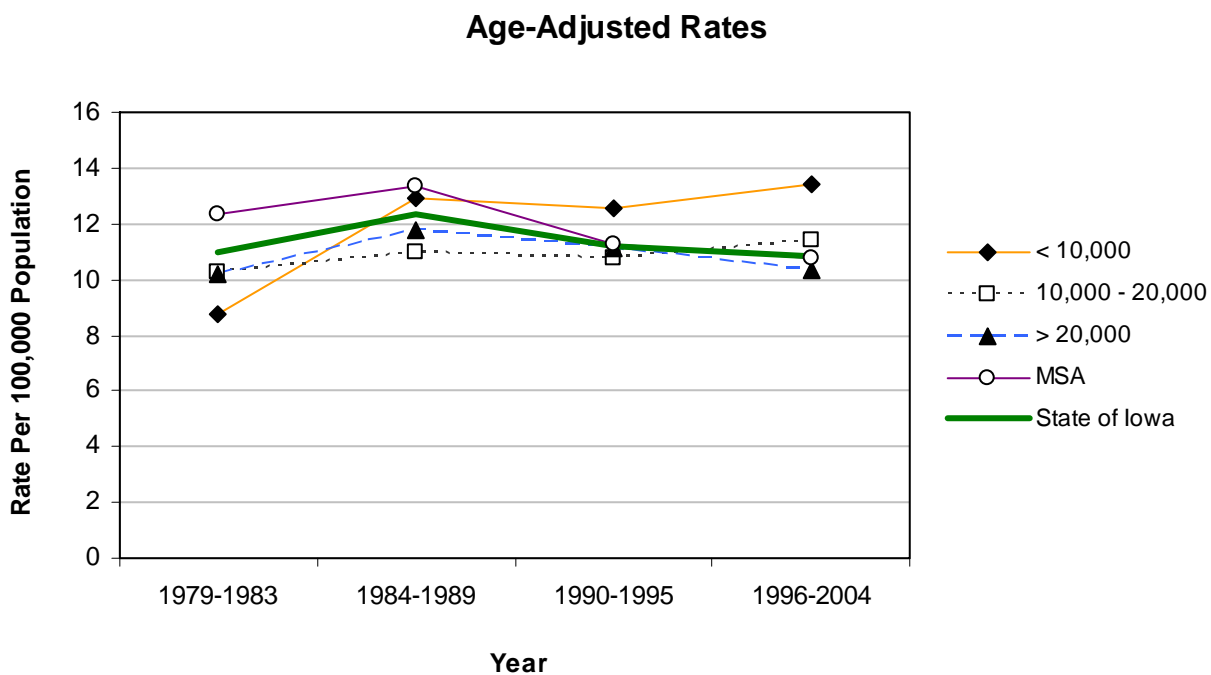
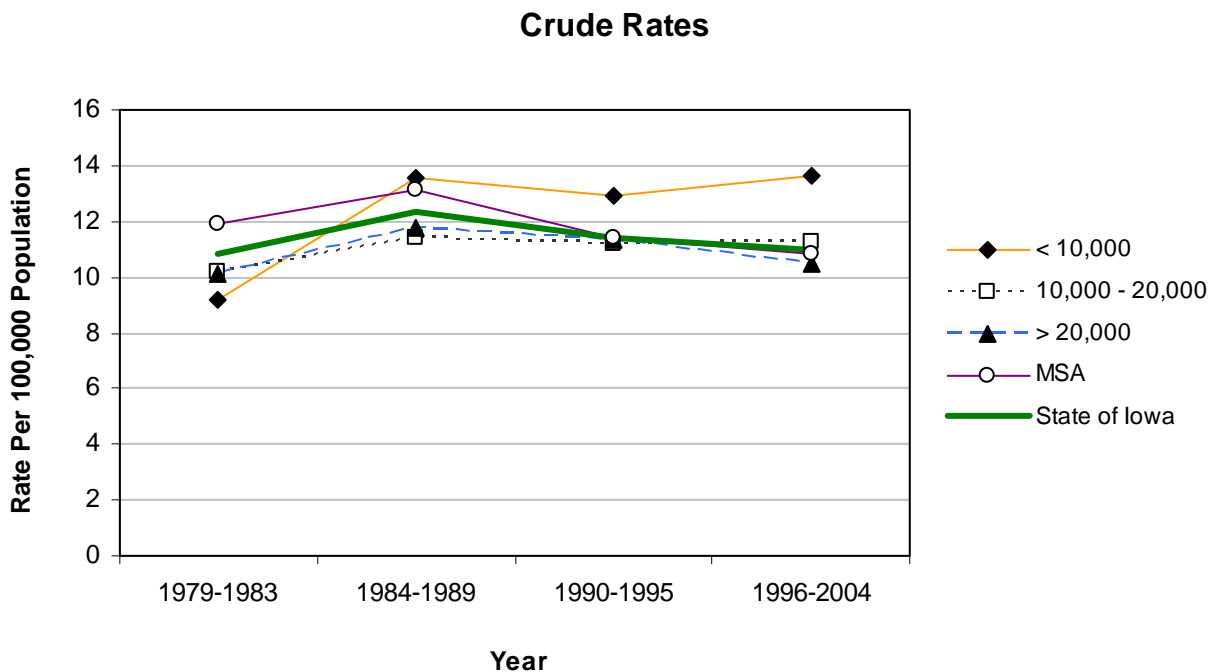
Suicides 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	9	12.3	12.4	Monona	13	14.5	13.1
	Adams	*	*	*	Monroe	17	23.7	24.5
	Audubon	6	9.9	8.5	Osceola	12	19.1	19.6
	Clarke	13	16.0	15.9	Palo Alto	8	8.8	8.7
	Davis	10	13.0	12.3	Pocahontas	14	18.1	18.2
	Decatur	8	10.4	9.8	Ringgold	7	14.4	14.6
	Fremont	7	9.8	11.2	Taylor	10	16.1	14.4
	Howard	12	13.5	14.9	Van Buren	14	20.1	18.7
	Ida	5	7.1	7.3	Wayne	5	8.2	7.3
	Lucas	10	11.8	11.8	Worth	11	15.5	16.2
					Total	191-195	13.4-13.6	13.2-13.4
Counties with Average Population 10,000 – 20,000	Allamakee	15	11.4	11.3	Hardin	19	11.3	10.7
	Appanoose	15	12.2	12.1	Humboldt	17	18.3	18.4
	Butler	14	10.2	11.6	Iowa	12	8.5	9.0
	Calhoun	7	7.0	7.6	Jefferson	29	19.8	18.9
	Cass	16	12.2	12.9	Keokuk	15	14.6	12.8
	Cedar	19	11.6	11.7	Kossuth	7	4.6	5.5
	Cherokee	10	8.6	8.6	Louisa	11	10.1	10.0
	Chickasaw	16	13.6	16.4	Lyon	9	8.5	9.5
	Clay	20	12.8	11.9	Mitchell	12	12.3	13.6
	Clayton	30	17.9	18.3	Montgomery	15	14.3	14.1
	Crawford	9	5.9	6.3	O'Brien	16	11.8	11.9
	Delaware	8	4.9	4.9	Page	18	11.8	11.2
	Dickinson	21	14.3	14.2	Poweshiek	19	11.2	10.6
	Emmet	9	9.1	8.1	Sac	9	8.7	8.3
	Floyd	16	10.6	10.1	Shelby	13	11.0	12.7
	Franklin	8	8.2	9.1	Tama	21	13.0	13.3
	Greene	13	14.1	14.6	Union	22	20.0	20.6
	Hamilton	10	6.8	6.6	Winnebago	11	10.5	11.2
	Hancock	11	10.2	11.5	Wright	12	9.4	9.8
					Total	554	11.3	11.4
Counties with Average Population > 20,000	Boone	26	11.1	11.0	Lee	54	15.9	16.1
	Buchanan	23	12.2	12.9	Mahaska	17	8.5	8.7
	Buena Vista	13	7.1	7.2	Marion	22	7.6	7.6
	Carroll	18	9.4	9.5	Marshall	37	10.5	10.5
	Cerro Gordo	45	10.8	10.7	Muscatine	32	8.5	8.7
	Clinton	60	13.3	12.8	Plymouth	19	8.5	8.5
	Des Moines	52	13.7	13.3	Sioux	16	5.6	5.4
	Fayette	18	9.2	9.2	Wapello	39	12.1	12.1
	Henry	12	6.6	6.4	Webster	40	11.2	11.2
	Jackson	32	17.6	17.3	Winneshiek	11	5.8	5.4
	Jasper	29	8.7	8.4	Total	615	10.5	10.4
MSA Counties	Benton	13	5.7	5.7	Linn	202	11.7	11.6
	Black Hawk	104	9.1	9.5	Madison	20	15.8	16.1
	Bremer	29	13.8	13.3	Mills	10	7.7	8.3
	Dallas	29	7.7	8.1	Polk	376	11.1	11.1
	Dubuque	95	11.8	11.9	Pottawattamie	106	13.5	13.6
	Grundy	11	9.9	9.5	Scott	157	11.0	11.0
	Guthrie	16	15.6	15.1	Story	60	8.4	8.7
	Harrison	17	12.1	12.5	Warren	50	13.6	13.8
	Johnson	81	8.1	8.1	Washington	23	12.3	11.8
	Jones	20	10.9	10.5	Woodbury	104	11.2	11.2
					Total	1,523	10.8	10.7
	State Total	2,883-7	10.9-11.0	10.7-10.8				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Suicides by County Group 1979-2004



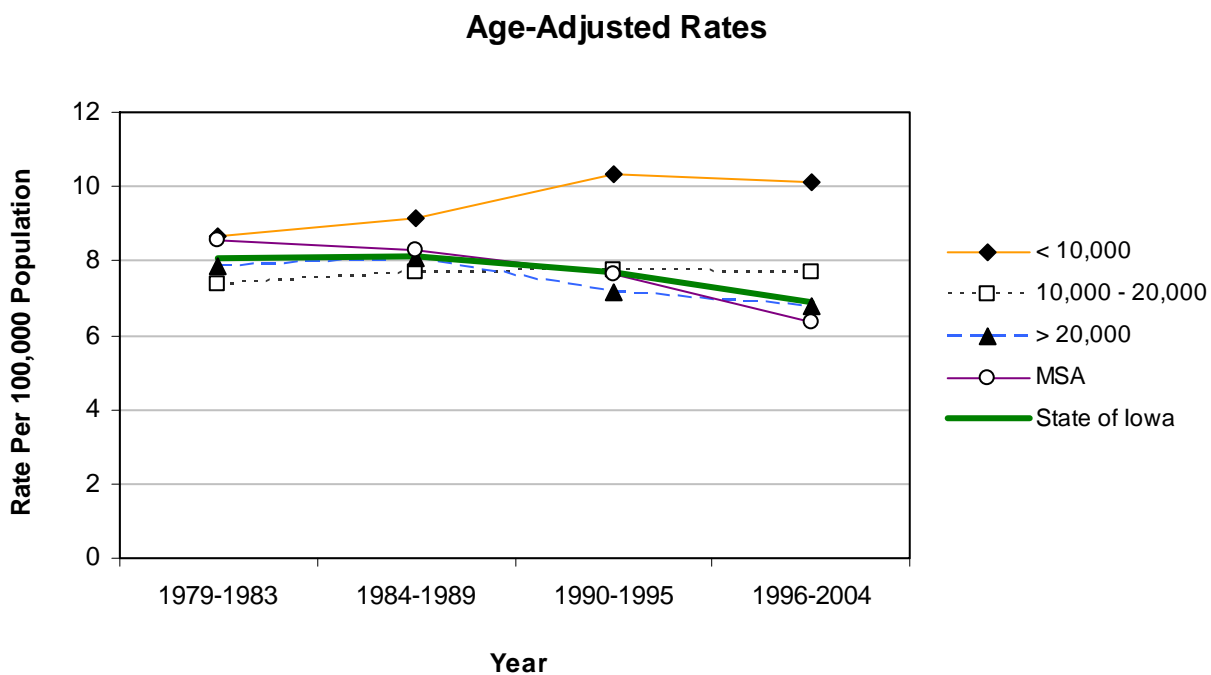
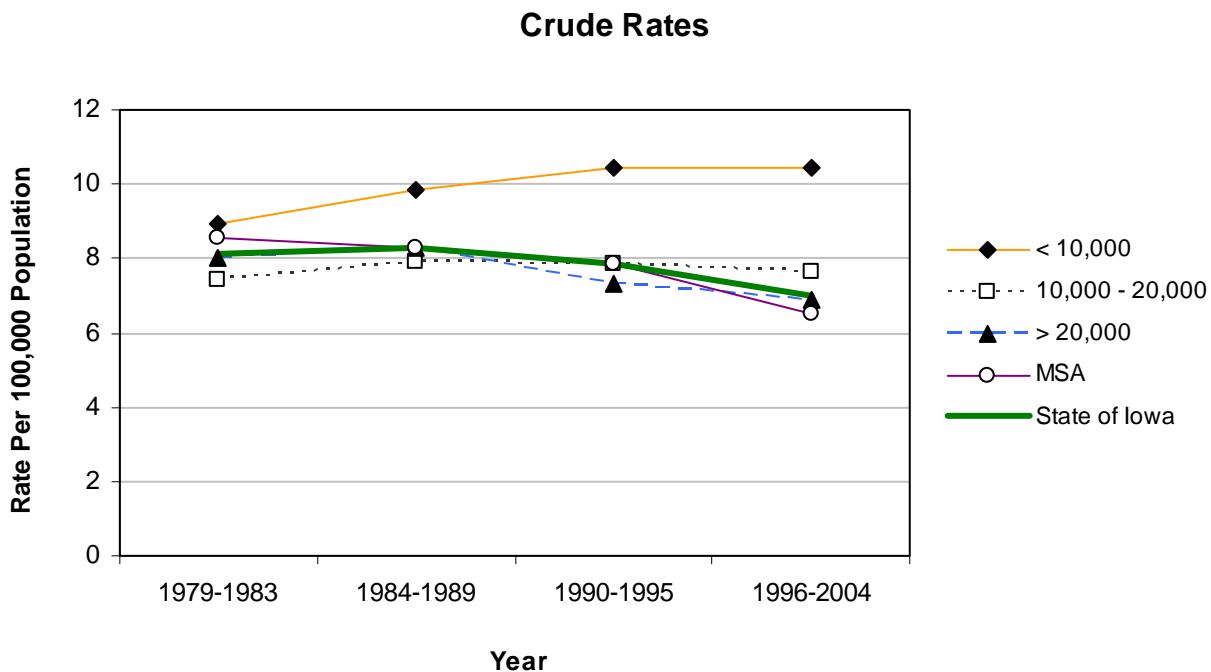
Firearms Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	8	10.9	10.8	Monona	10	11.2	9.6
	Adams	*	*	*	Monroe	10	13.9	13.3
	Audubon	*	*	*	Osceola	7	11.1	10.4
	Clarke	8	9.9	9.2	Palo Alto	7	7.7	7.2
	Davis	11	14.3	13.6	Pocahontas	8	10.3	10.3
	Decatur	8	10.4	8.9	Ringgold	6	12.3	13.0
	Fremont	7	9.8	11.0	Taylor	9	14.5	12.9
	Howard	8	9.0	10.1	Van Buren	15	21.5	20.6
	Ida	*	*	*	Wayne	*	*	*
	Lucas	6	7.1	7.2	Worth	7	9.9	10.4
					Total	149	10.4	10.1
Counties with Average Population 10,000 – 20,000	Allamakee	11	8.4	9.7	Hardin	16	9.5	8.3
	Appanoose	10	8.1	7.8	Humboldt	14	15.1	15.1
	Butler	10	7.3	8.0	Iowa	13	9.2	9.7
	Calhoun	*	*	*	Jefferson	15	10.3	9.8
	Cass	10	7.6	7.7	Keokuk	10	9.8	8.4
	Cedar	13	8.0	8.1	Kossuth	7	4.6	5.5
	Cherokee	*	*	*	Louisa	7	6.4	6.3
	Chickasaw	13	11.1	13.5	Lyon	6	5.7	6.6
	Clay	11	7.1	6.8	Mitchell	*	*	*
	Clayton	23	13.7	13.9	Montgomery	9	8.6	8.1
	Crawford	5	3.3	3.5	O'Brien	8	5.9	6.0
	Delaware	5	3.0	2.9	Page	14	9.2	8.3
	Dickinson	12	8.2	8.8	Poweshiek	14	8.2	7.5
	Emmet	8	8.1	7.4	Sac	8	7.8	8.2
	Floyd	7	4.6	4.2	Shelby	13	11.0	12.8
	Franklin	8	8.2	9.4	Tama	17	10.5	11.0
	Greene	6	6.5	6.5	Union	12	10.9	11.7
	Hamilton	10	6.8	6.5	Winnebago	9	8.6	8.3
	Hancock	*	*	*	Wright	7	5.5	6.6
					Total	374	7.6	7.7
Counties with Average Population > 20,000	Boone	17	7.2	7.3	Lee	26	7.6	7.4
	Buchanan	12	6.3	6.7	Mahaska	11	5.5	5.6
	Buena Vista	6	3.3	3.5	Marion	18	6.2	6.2
	Carroll	10	5.2	5.0	Marshall	28	7.9	7.7
	Cerro Gordo	37	8.9	8.7	Muscatine	23	6.1	6.3
	Clinton	42	9.3	8.7	Plymouth	8	3.6	3.7
	Des Moines	43	11.4	11.2	Sioux	15	5.3	5.0
	Fayette	11	5.6	5.6	Wapello	35	10.8	10.9
	Henry	8	4.4	4.2	Webster	19	5.3	5.0
	Jackson	18	9.9	9.5	Winneshiek	*	*	*
	Jasper	14	4.2	3.9	Total	401-405	6.7-6.9	6.6-6.8
MSA Counties	Benton	9	3.9	4.1	Linn	99	5.8	5.7
	Black Hawk	60	5.2	5.1	Madison	13	10.2	10.8
	Bremer	13	6.2	6.1	Mills	6	4.6	4.6
	Dallas	24	6.4	6.6	Polk	260	7.7	7.7
	Dubuque	44	5.5	5.4	Pottawattamie	70	8.9	8.9
	Grundy	9	8.1	8.6	Scott	98	6.9	6.9
	Guthrie	11	10.8	11.5	Story	31	4.3	4.5
	Harrison	16	11.4	11.7	Warren	34	9.3	9.3
	Johnson	34	3.4	3.4	Washington	16	8.5	8.0
	Jones	12	6.5	6.2	Woodbury	54	5.8	5.8
					Total	913	6.5	6.4
State Total		1,837-41	6.9-7.0	6.8-6.9				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Firearms Mortality by County Group 1979-2004



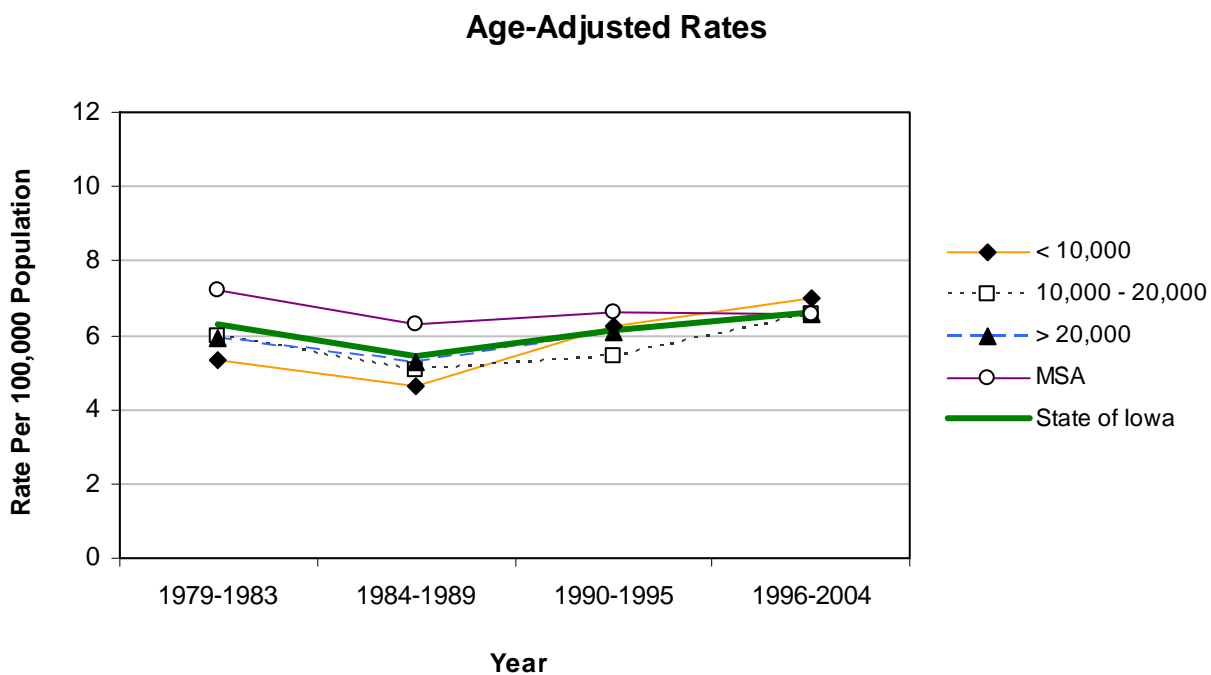
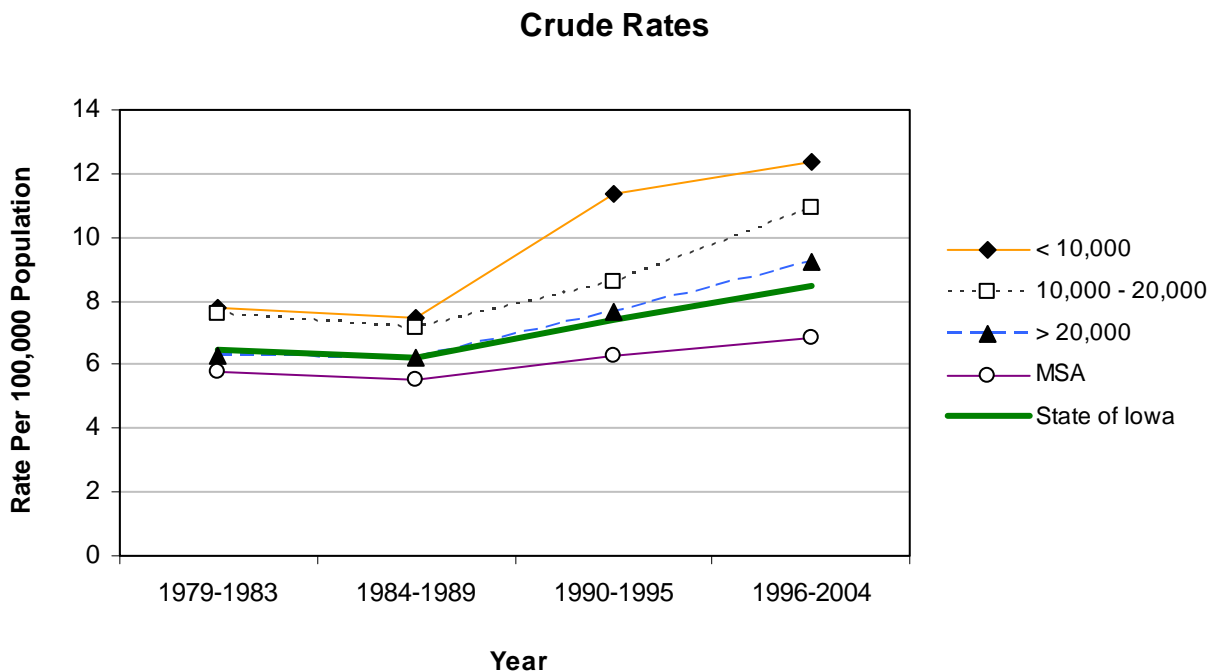
Falls Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	11	15.0	6.4	Monona	6	6.7	3.0
	Adams	6	15.0	7.4	Monroe	9	12.5	8.0
	Audubon	14	23.1	13.1	Osceola	*	*	*
	Clarke	6	7.4	5.7	Palo Alto	13	14.4	8.6
	Davis	14	18.2	12.1	Pocahontas	10	12.9	6.2
	Decatur	6	7.8	6.4	Ringgold	*	*	*
	Fremont	10	14.0	8.3	Taylor	9	14.5	7.5
	Howard	12	13.5	6.6	Van Buren	8	11.5	7.8
	Ida	9	12.9	7.0	Wayne	13	21.4	10.4
	Lucas	7	8.2	5.0	Worth	8	11.3	5.1
					Total	177	12.4	7.0
Counties with Average Population 10,000 – 20,000	Allamakee	17	13.0	8.1	Hardin	24	14.3	7.4
	Appanoose	9	7.3	5.5	Humboldt	8	8.6	5.2
	Butler	10	7.3	4.3	Iowa	10	7.1	4.8
	Calhoun	22	22.1	11.0	Jefferson	13	8.9	7.5
	Cass	26	19.8	10.6	Keokuk	11	10.7	5.0
	Cedar	20	12.3	7.3	Kossuth	15	9.8	5.7
	Cherokee	7	6.0	3.6	Louisa	6	5.5	4.3
	Chickasaw	8	6.8	4.5	Lyon	15	14.2	7.8
	Clay	12	7.7	5.4	Mitchell	10	10.2	5.4
	Clayton	19	11.3	7.7	Montgomery	24	22.9	13.0
	Crawford	12	7.9	5.2	O'Brien	12	8.9	5.2
	Delaware	12	7.3	5.8	Page	20	13.2	7.6
	Dickinson	21	14.3	8.1	Poweshiek	22	12.9	7.6
	Emmet	17	17.2	9.1	Sac	14	13.6	6.7
	Floyd	10	6.6	3.5	Shelby	12	10.2	5.2
	Franklin	14	14.4	9.4	Tama	8	4.9	3.5
	Greene	18	19.5	10.2	Union	14	12.7	7.4
	Hamilton	14	9.5	6.1	Winnebago	6	5.7	3.8
	Hancock	9	8.3	5.5	Wright	16	12.5	6.9
					Total	537	10.9	6.6
Counties with Average Population > 20,000	Boone	17	7.2	4.6	Lee	35	10.3	7.0
	Buchanan	24	12.7	10.2	Mahaska	13	6.5	4.6
	Buena Vista	21	11.5	7.7	Marion	34	11.8	8.2
	Carroll	18	9.4	5.6	Marshall	42	11.9	8.5
	Cerro Gordo	34	8.2	5.7	Muscatine	28	7.5	6.8
	Clinton	27	6.0	4.7	Plymouth	15	6.7	5.0
	Des Moines	32	8.5	6.1	Sioux	20	7.0	5.7
	Fayette	17	8.6	5.1	Wapello	33	10.2	6.8
	Henry	15	8.2	6.1	Webster	60	16.8	10.9
	Jackson	13	7.1	4.9	Winneshiek	18	9.4	6.1
	Jasper	26	7.8	6.0	Total	542	9.2	6.6
MSA Counties	Benton	16	7.0	5.5	Linn	131	7.6	7.4
	Black Hawk	85	7.4	6.3	Madison	9	7.1	5.2
	Bremer	19	9.0	6.8	Mills	5	3.8	3.7
	Dallas	21	5.6	5.6	Polk	205	6.1	6.5
	Dubuque	54	6.7	5.4	Pottawattamie	50	6.4	6.0
	Grundy	10	9.0	5.0	Scott	113	7.9	8.2
	Guthrie	8	7.8	5.2	Story	30	4.2	4.6
	Harrison	18	12.8	8.1	Warren	26	7.1	7.0
	Johnson	44	4.4	6.6	Washington	25	13.3	7.0
	Jones	13	7.1	5.3	Woodbury	82	8.8	7.9
					Total	964	6.9	6.6
	State Total	2,220	8.4	6.6				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Falls Mortality by County Group 1979-2004



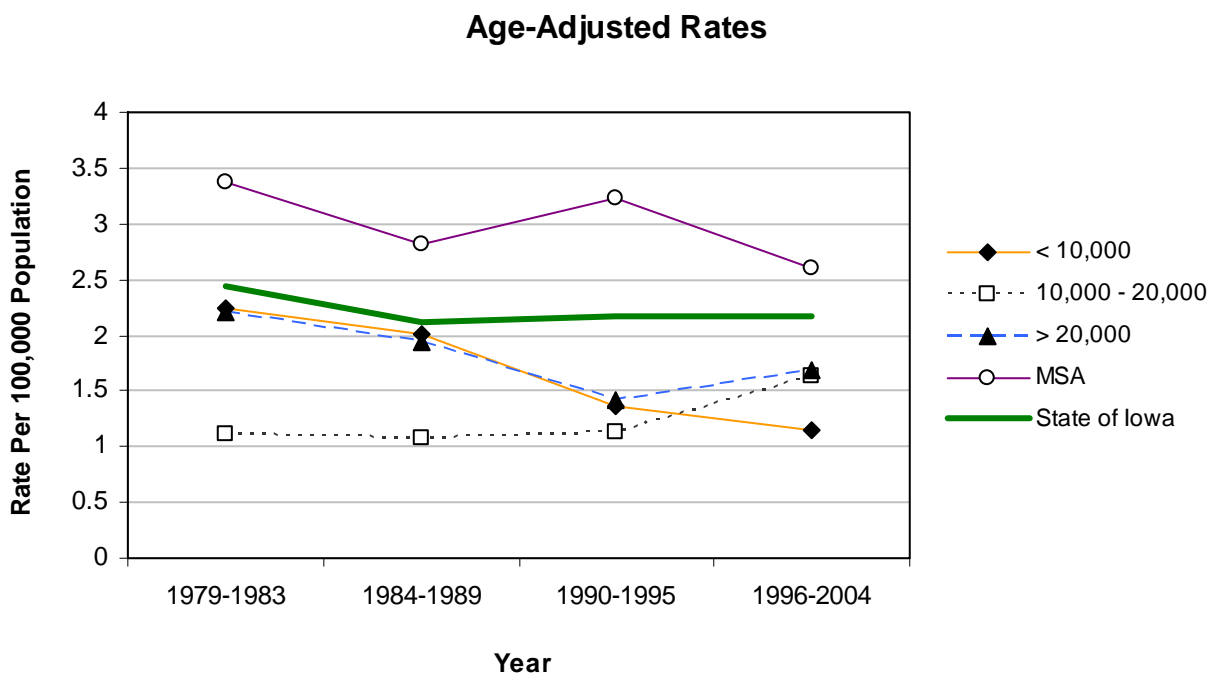
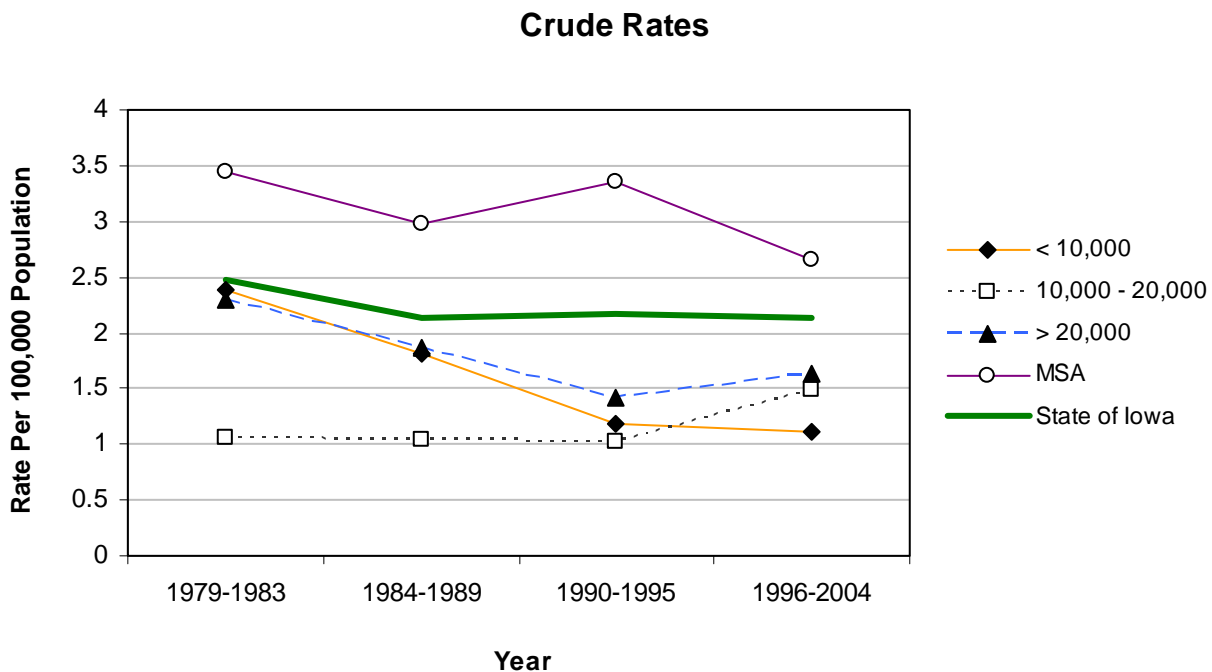
Homicides 1996-2004

	County	#	Crude Rate ¹	Adjusted Rate ^{1,2}	County	#	Crude Rate ¹	Adjusted Rate ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	16	1.1	1.1
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Mitchell	*	*	*
	Clayton	*	*	*	Montgomery	*	*	*
	Crawford	*	*	*	O'Brien	*	*	*
	Delaware	*	*	*	Page	*	*	*
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	5	5.2	5.8	Tama	8	4.9	5.6
	Greene	*	*	*	Union	5	4.5	5.1
	Hamilton	*	*	*	Winnebago	*	*	*
	Hancock	*	*	*	Wright	*	*	*
					Total	73	1.5	1.6
Counties with Average Population > 20,000	Boone	*	*	*	Lee	*	*	*
	Buchanan	*	*	*	Mahaska	*	*	*
	Buena Vista	*	*	*	Marion	*	*	*
	Carroll	*	*	*	Marshall	11	3.1	3.1
	Cerro Gordo	13	3.1	3.1	Muscatine	6	1.6	1.6
	Clinton	7	1.5	1.6	Plymouth	*	*	*
	Des Moines	7	1.9	1.9	Sioux	*	*	*
	Fayette	*	*	*	Wapello	10	3.1	3.4
	Henry	*	*	*	Webster	9	2.5	2.5
	Jackson	*	*	*	Winneshiek	*	*	*
	Jasper	*	*	*	Total	96	1.6	1.7
MSA Counties	Benton	*	*	*	Linn	27	1.6	1.5
	Black Hawk	24	2.1	1.9	Madison	5	3.9	3.9
	Bremer	*	*	*	Mills	*	*	*
	Dallas	5	1.3	1.4	Polk	159	4.7	4.6
	Dubuque	6	0.7	0.8	Pottawattamie	43	5.5	5.6
	Grundy	*	*	*	Scott	38	2.7	2.6
	Guthrie	*	*	*	Story	*	*	*
	Harrison	*	*	*	Warren	5	1.4	1.4
	Johnson	15	1.5	1.6	Washington	*	*	*
	Jones	*	*	*	Woodbury	29	3.1	3.1
					Total	374	2.7	2.6
	State Total	559	2.1	2.2				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Homicides by County Group 1979-2004



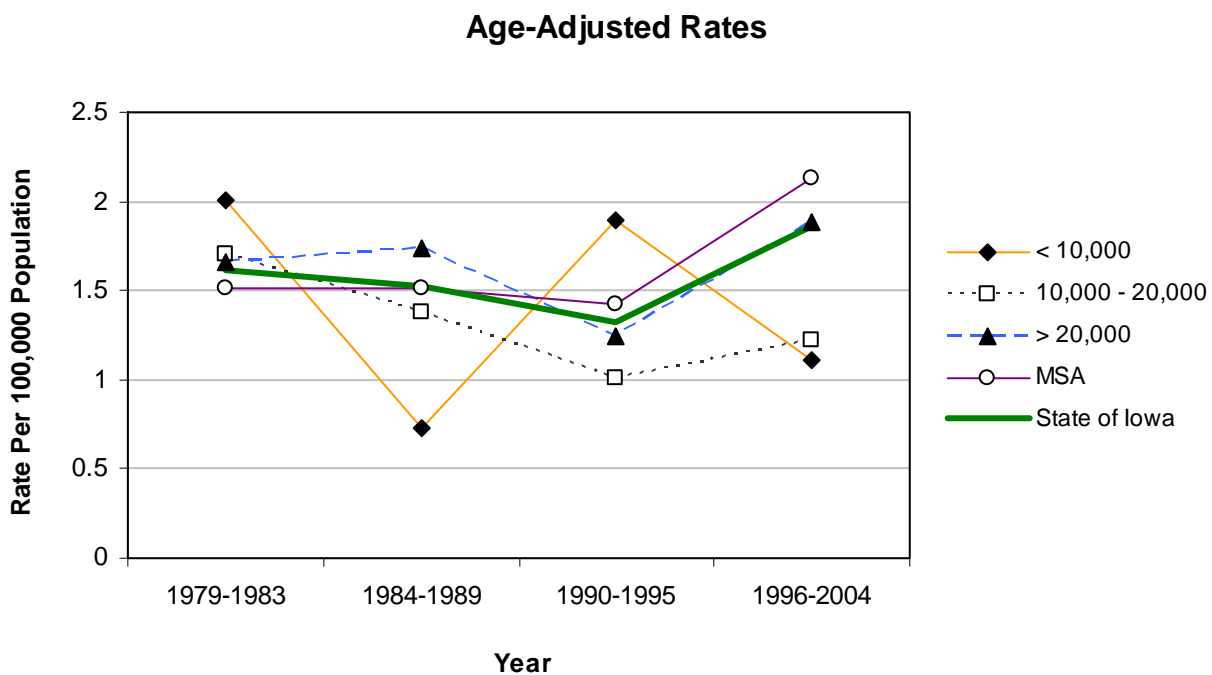
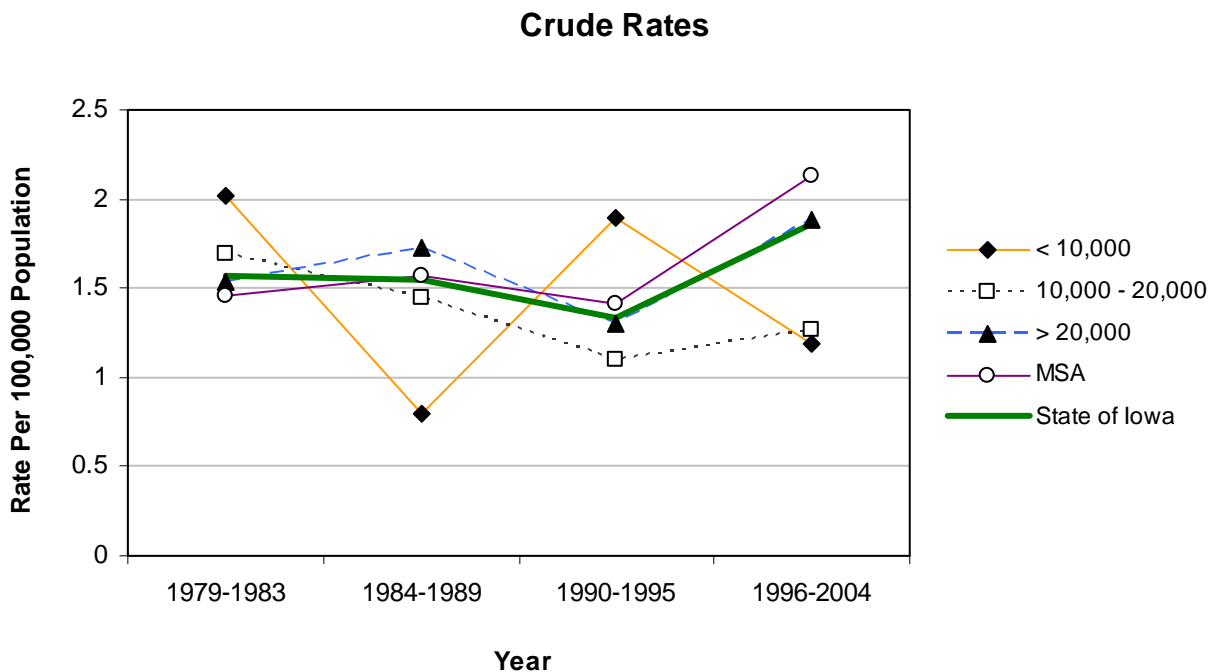
Poisoning Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	17	1.2	1.1
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	5	4.3	3.4	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Mitchell	*	*	*
	Clayton	*	*	*	Montgomery	*	*	*
	Crawford	*	*	*	O'Brien	*	*	*
	Delaware	*	*	*	Page	*	*	*
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	*	*	*	Tama	*	*	*
	Greene	*	*	*	Union	*	*	*
	Hamilton	*	*	*	Winnebago	*	*	*
	Hancock	*	*	*	Wright	*	*	*
					Total	62	1.3	1.2
Counties with Average Population > 20,000	Boone	6	2.6	2.5	Lee	9	2.6	2.7
	Buchanan	*	*	*	Mahaska	8	4.0	4.0
	Buena Vista	*	*	*	Marion	5	1.7	1.6
	Carroll	*	*	*	Marshall	5	1.4	1.3
	Cerro Gordo	7	1.7	1.7	Muscatine	5	1.3	1.3
	Clinton	6	1.3	1.3	Plymouth	6	2.7	2.8
	Des Moines	9	2.4	2.5	Sioux	*	*	*
	Fayette	5	2.5	2.5	Wapello	7	2.2	2.3
	Henry	*	*	*	Webster	8	2.2	2.3
	Jackson	*	*	*	Winneshiek	*	*	*
	Jasper	8	2.4	2.4	Total	111	1.9	1.9
MSA Counties	Benton	*	*	*	Linn	51	3.0	2.9
	Black Hawk	24	2.1	2.2	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	5	1.3	1.3	Polk	78	2.3	2.3
	Dubuque	5	0.6	0.6	Pottawattamie	17	2.2	2.2
	Grundy	*	*	*	Scott	35	2.5	2.4
	Guthrie	*	*	*	Story	6	0.8	0.9
	Harrison	*	*	*	Warren	5	1.4	1.5
	Johnson	29	2.9	3.0	Washington	*	*	*
	Jones	*	*	*	Woodbury	32	3.4	3.5
					Total	300	2.1	2.1
	State Total	490	1.9	1.9				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Poisoning Mortality by County Group 1979-2004



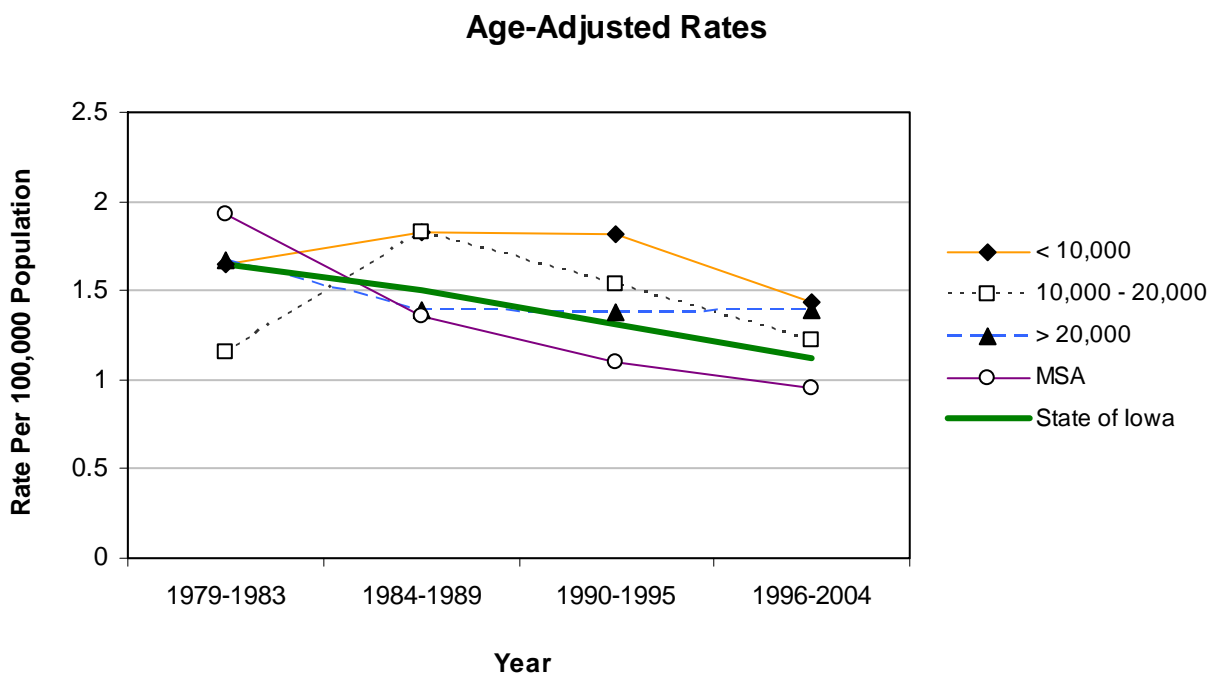
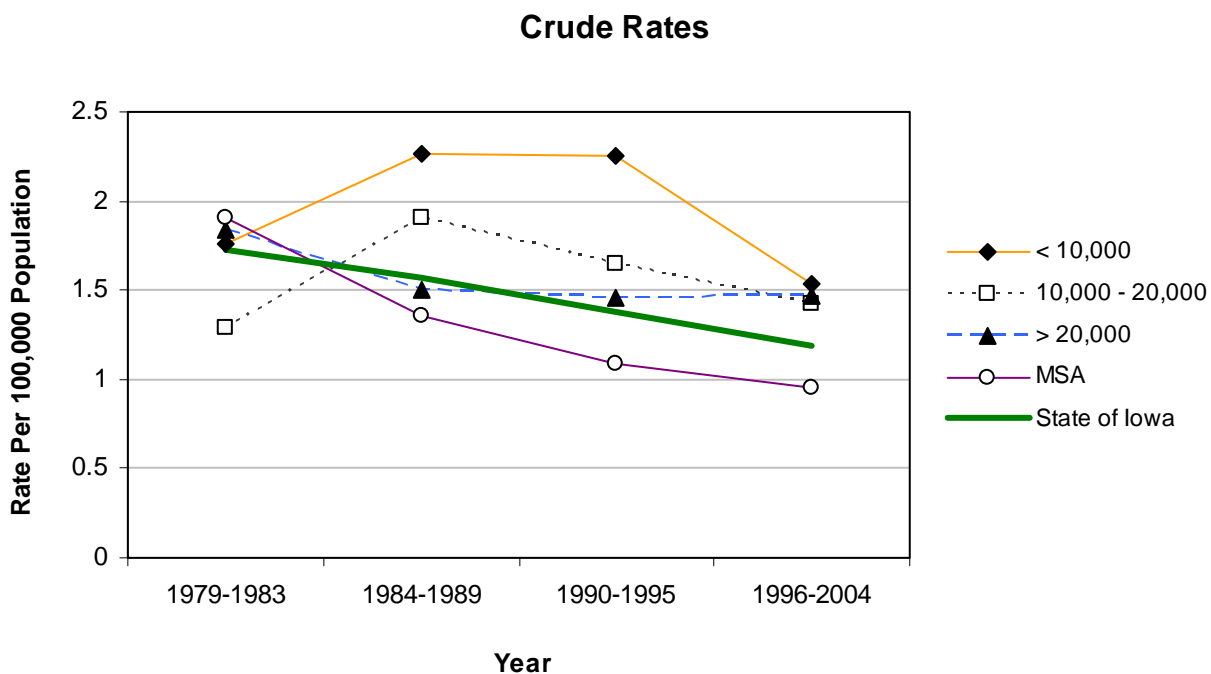
Burns Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	22	1.5	1.4
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Mitchell	*	*	*
	Clayton	*	*	*	Montgomery	*	*	*
	Crawford	*	*	*	O'Brien	*	*	*
	Delaware	*	*	*	Page	*	*	*
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	*	*	*	Tama	*	*	*
	Greene	*	*	*	Union	*	*	*
	Hamilton	*	*	*	Winnebago	8	7.6	7.3
	Hancock	*	*	*	Wright	*	*	*
					Total	70	1.4	1.2
Counties with Average Population > 20,000	Boone	*	*	*	Lee	8	2.4	2.6
	Buchanan	*	*	*	Mahaska	5	2.5	2.7
	Buena Vista	5	2.7	3.0	Marion	*	*	*
	Carroll	*	*	*	Marshall	*	*	*
	Cerro Gordo	*	*	*	Muscatine	7	1.9	1.9
	Clinton	10	2.2	2.1	Plymouth	*	*	*
	Des Moines	*	*	*	Sioux	*	*	*
	Fayette	*	*	*	Wapello	8	2.5	2.4
	Henry	*	*	*	Webster	5	1.4	1.5
	Jackson	*	*	*	Winneshiek	*	*	*
	Jasper	*	*	*	Total	86	1.5	1.4
MSA Counties	Benton	*	*	*	Linn	15	0.9	0.9
	Black Hawk	17	1.5	1.5	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	*	*	*	Polk	32	0.9	1.0
	Dubuque	*	*	*	Pottawattamie	*	*	*
	Grundy	*	*	*	Scott	16	1.1	1.1
	Guthrie	*	*	*	Story	7	1.0	1.0
	Harrison	*	*	*	Warren	*	*	*
	Johnson	8	0.8	1.0	Washington	6	3.2	2.9
	Jones	*	*	*	Woodbury	7	0.8	0.7
					Total	134	1.0	1.0
	State Total	312	1.2	1.1				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Burns Mortality by County Group 1979-2004



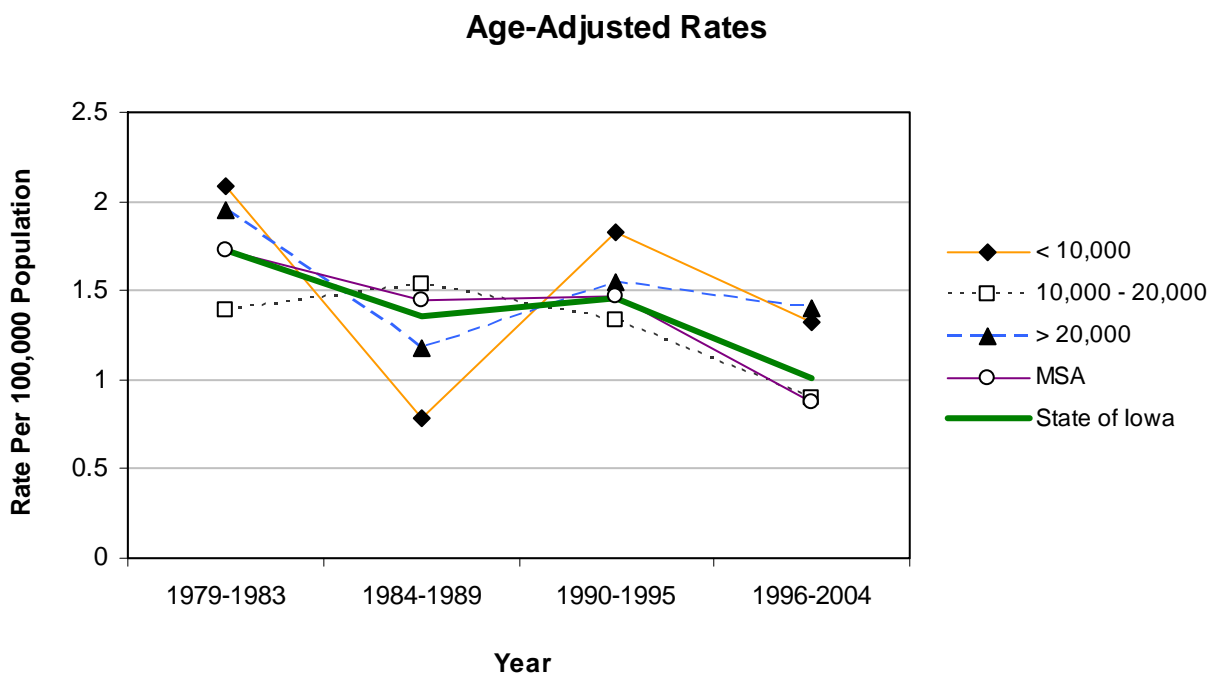
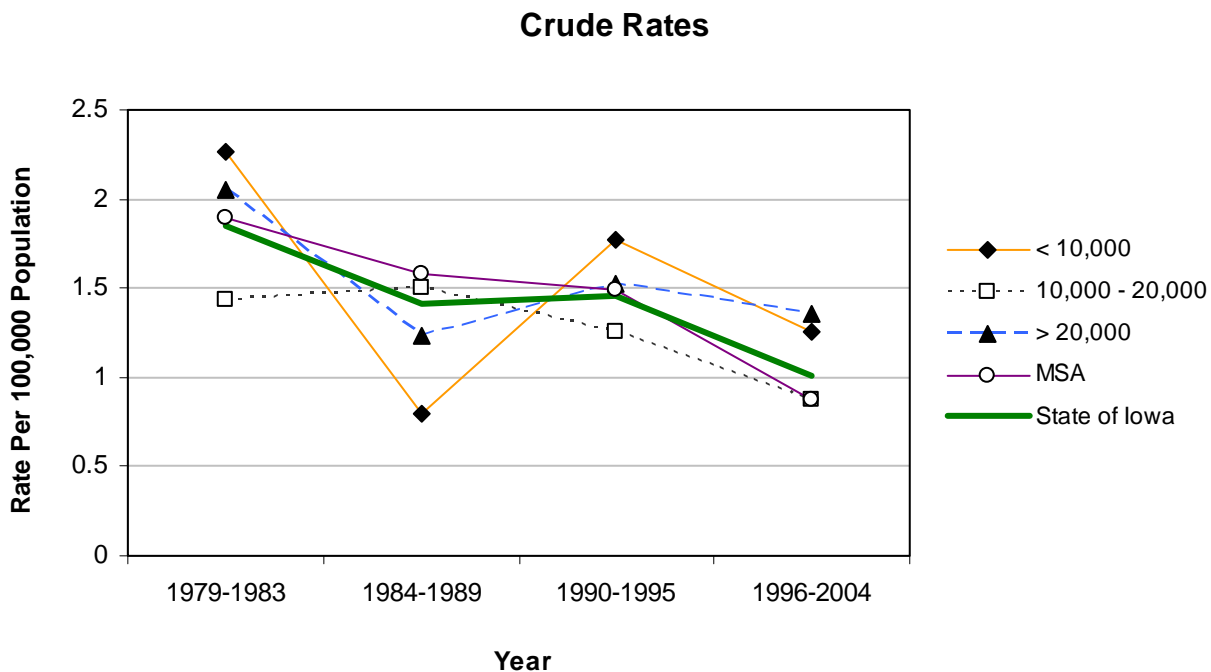
Drowning Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	*	*	*
					Total	18	1.3	1.3
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	*	Hardin	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Mitchell	*	*	*
	Clayton	*	*	*	Montgomery	*	*	*
	Crawford	*	*	*	O'Brien	*	*	*
	Delaware	*	*	*	Page	*	*	*
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	*	*	*
	Franklin	*	*	*	Tama	*	*	*
	Greene	*	*	*	Union	*	*	*
	Hamilton	*	*	*	Winnebago	*	*	*
	Hancock	*	*	*	Wright	*	*	*
					Total	43	0.9	0.9
Counties with Average Population > 20,000	Boone	*	*	*	Lee	10	2.9	2.9
	Buchanan	*	*	*	Mahaska	*	*	*
	Buena Vista	*	*	*	Marion	*	*	*
	Carroll	*	*	*	Marshall	8	2.3	2.4
	Cerro Gordo	10	2.4	2.6	Muscatine	*	*	*
	Clinton	9	2.0	2.1	Plymouth	*	*	*
	Des Moines	6	1.6	1.7	Sioux	*	*	*
	Fayette	*	*	*	Wapello	6	1.9	1.8
	Henry	*	*	*	Webster	*	*	*
	Jackson	*	*	*	Winneshiek	*	*	*
	Jasper	7	2.1	2.3	Total	80	1.4	1.4
MSA Counties	Benton	*	*	*	Linn	15	0.9	0.9
	Black Hawk	9	0.8	0.8	Madison	*	*	*
	Bremer	*	*	*	Mills	*	*	*
	Dallas	8	2.1	2.1	Polk	29	0.9	0.9
	Dubuque	*	*	*	Pottawattamie	12	1.5	1.6
	Grundy	*	*	*	Scott	11	0.8	0.8
	Guthrie	*	*	*	Story	*	*	*
	Harrison	*	*	*	Warren	*	*	*
	Johnson	6	0.6	0.6	Washington	*	*	*
	Jones	5	2.7	3.0	Woodbury	14	1.5	1.5
					Total	123	0.9	0.9
	State Total	264	1.0	1.0				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

Drowning Mortality by County Group 1979-2004



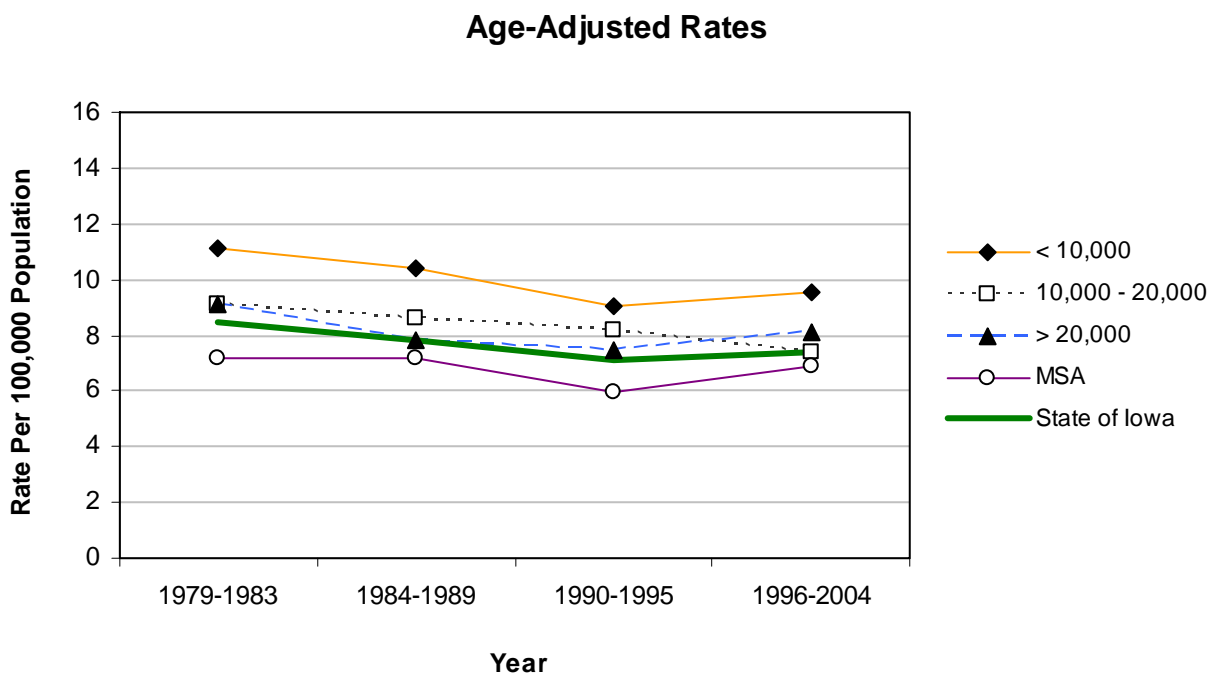
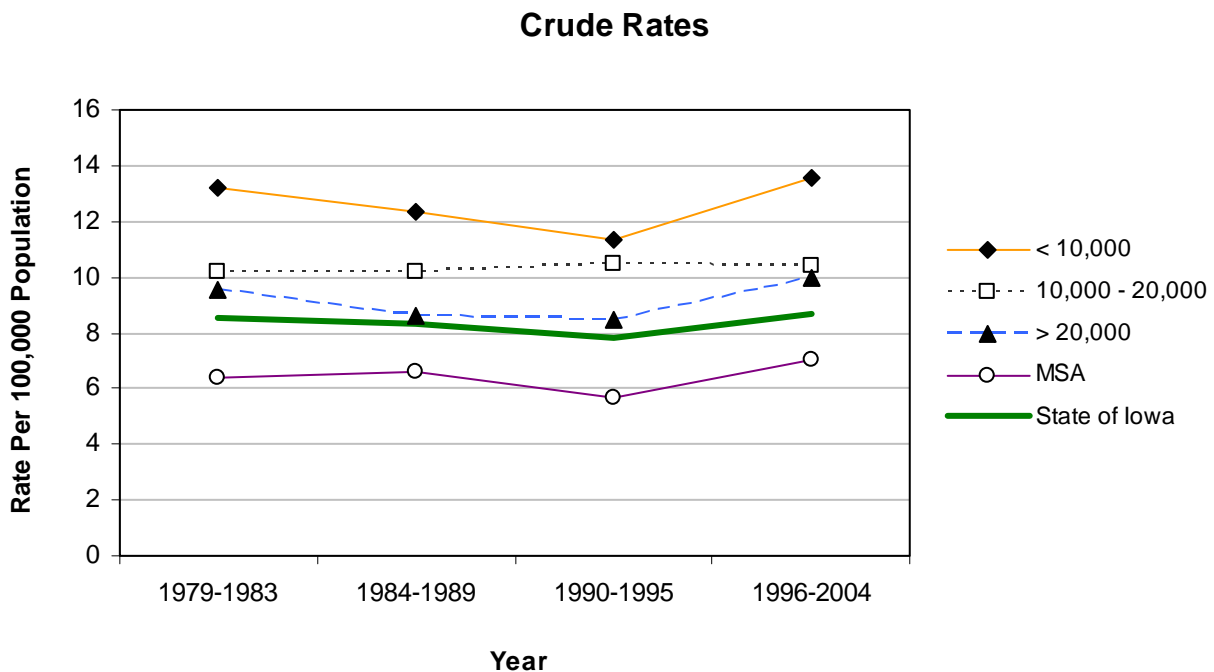
All Other Unintentional Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	7	9.5	5.2	Monona	15	16.8	9.8
	Adams	*	*	*	Monroe	*	*	*
	Audubon	9	14.8	6.6	Osceola	7	11.1	9.5
	Clarke	10	12.3	9.5	Palo Alto	12	13.3	9.5
	Davis	16	20.8	16.2	Pocahontas	6	7.8	6.4
	Decatur	10	12.9	9.4	Ringgold	10	20.5	17.4
	Fremont	10	14.0	9.7	Taylor	12	19.3	10.2
	Howard	11	12.3	8.8	Van Buren	18	25.8	19.4
	Ida	18	25.7	20.4	Wayne	6	9.9	7.0
	Lucas	6	7.1	4.0	Worth	*	*	*
					Total	194	13.6	9.5
Counties with Average Population 10,000 – 20,000	Allamakee	17	13.0	8.9	Hardin	16	9.5	5.8
	Appanoose	12	9.8	6.7	Humboldt	7	7.5	4.8
	Butler	16	11.7	8.3	Iowa	14	9.9	6.6
	Calhoun	11	11.1	7.6	Jefferson	9	6.2	5.8
	Cass	19	14.4	10.3	Keokuk	11	10.7	8.5
	Cedar	12	7.4	5.6	Kossuth	14	9.1	7.7
	Cherokee	11	9.4	7.7	Louisa	14	12.8	11.4
	Chickasaw	9	7.7	5.6	Lyon	7	6.6	4.1
	Clay	15	9.6	6.5	Mitchell	17	17.4	11.7
	Clayton	17	10.1	7.3	Montgomery	14	13.4	8.2
	Crawford	21	13.8	10.9	O'Brien	14	10.3	8.1
	Delaware	11	6.7	6.1	Page	21	13.8	8.4
	Dickinson	15	10.2	7.3	Poweshiek	18	10.6	7.7
	Emmet	15	15.1	10.2	Sac	7	6.8	5.1
	Floyd	11	7.3	4.9	Shelby	19	16.1	9.5
	Franklin	10	10.3	6.6	Tama	14	8.7	6.4
	Greene	7	7.6	4.4	Union	11	10.0	7.6
	Hamilton	14	9.5	6.3	Winnebago	17	16.2	9.2
	Hancock	9	8.3	6.6	Wright	16	12.5	9.3
					Total	512	10.4	7.4
Counties with Average Population > 20,000	Boone	29	12.3	9.4	Lee	31	9.1	7.2
	Buchanan	16	8.5	7.5	Mahaska	12	6.0	4.5
	Buena Vista	20	10.9	9.5	Marion	36	12.5	10.3
	Carroll	25	13.0	10.2	Marshall	43	12.2	9.6
	Cerro Gordo	36	8.7	6.9	Muscatine	29	7.7	7.2
	Clinton	37	8.2	7.1	Plymouth	26	11.7	10.3
	Des Moines	31	8.2	6.4	Sioux	22	7.7	6.9
	Fayette	20	10.2	6.7	Wapello	32	9.9	7.8
	Henry	30	16.5	14.3	Webster	53	14.8	11.6
	Jackson	15	8.2	6.4	Winneshiek	15	7.9	6.7
	Jasper	29	8.7	7.3	Total	587	10.0	8.1
MSA Counties	Benton	26	11.4	9.3	Linn	112	6.5	6.4
	Black Hawk	100	8.7	7.9	Madison	18	14.2	12.8
	Bremer	15	7.1	5.5	Mills	22	16.9	16.2
	Dallas	20	5.3	5.5	Polk	186	5.5	5.8
	Dubuque	43	5.3	4.7	Pottawattamie	58	7.4	7.0
	Grundy	13	11.7	8.4	Scott	107	7.5	7.7
	Guthrie	6	5.9	3.6	Story	40	5.6	6.1
	Harrison	26	18.5	14.6	Warren	24	6.5	6.7
	Johnson	52	5.2	7.7	Washington	22	11.7	7.5
	Jones	19	10.4	8.7	Woodbury	82	8.8	8.2
					Total	991	7.0	6.9
	State Total	2,284	8.7	7.4				

¹Rates per 100,000 Population²Adjusted to Year 2000 Population

Source: State Health Registry of Iowa

All Other Unintentional Mortality by County Group 1979-2004



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Youth Injury Mortality

Injuries remain the leading cause of death in persons age 1-34 years and contribute the most to years of life lost (YLL), particularly for those events of pre-adult ages. Deaths from unintentional injuries, homicides, and suicides are important public health problems in those 15-24 years of age and many of these deaths are preventable.

Transportation fatalities accounted for 277 deaths for youth aged 0-14 from 1996-2004. Of these, 87% were due to motor vehicle traffic death. In the 15-19 age range, 570 transportation deaths occurred over this same period with 96% accounted for by motor vehicle traffic deaths. In general, transportation mortality rates are higher in the more rural counties for both age groups. For 15-19 year-olds during 1996 through 2004, the mortality rate in the most rural of counties was double that of the state. Tables other than transportation are not presented due to the small number of events in both age ranges.

HIGHLIGHTS...

- ✓ Unintentional injuries, homicides, and suicides are important public health problems in those 15-24 years of age.
- ✓ Injuries contribute the most to years of life lost (YLL).
- ✓ Motor vehicle deaths accounted for 96% of all transportation deaths in youth aged 15-19 in Iowa.

The cause of death data are obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa at the University of Iowa. Crude and age-adjusted rates for ages 15-19 are identical to one another because only one age group in the age-adjustment analysis is represented. The crude and age-adjusted rates for the 0-14 age group show only slight differences as this represents four age groups (< 1, 1-4, 5-9, and 10-14) in the age-adjustment analysis. We therefore display only crude rates in the tables and graphs.

Age 0-14: All Transportation Mortality 1996-2004

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	*	*
	Lucas	*	*	Worth	*	*
				Total	22	8.0
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	*	*
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	6	27.3	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	*	*	Montgomery	*	*
	Crawford	5	16.1	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	*	*	Wright	*	*
				Total	73	7.6
Counties with Average Population > 20,000	Boone	8	17.5	Lee	*	*
	Buchanan	*	*	Mahaska	7	17.2
	Buena Vista	*	*	Marion	*	*
	Carroll	*	*	Marshall	5	7.1
	Cerro Gordo	*	*	Muscatine	*	*
	Clinton	5	5.4	Plymouth	*	*
	Des Moines	*	*	Sioux	7	11.4
	Fayette	*	*	Wapello	10	16.3
	Henry	*	*	Webster	*	*
	Jackson	*	*	Winneshiek	*	*
	Jasper	5	7.6	Total	72	6.1
MSA Counties	Benton	*	*	Linn	16	4.5
	Black Hawk	10	4.7	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	5	6.0	Polk	22	3.1
	Dubuque	*	*	Pottawattamie	5	3.0
	Grundy	*	*	Scott	9	2.9
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	*	*
	Johnson	*	*	Washington	*	*
	Jones	*	*	Woodbury	15	7.1
				Total	110	3.9
	State Total	277	5.3			

¹Rates per 100,000 Population

Source: State Health Registry of Iowa

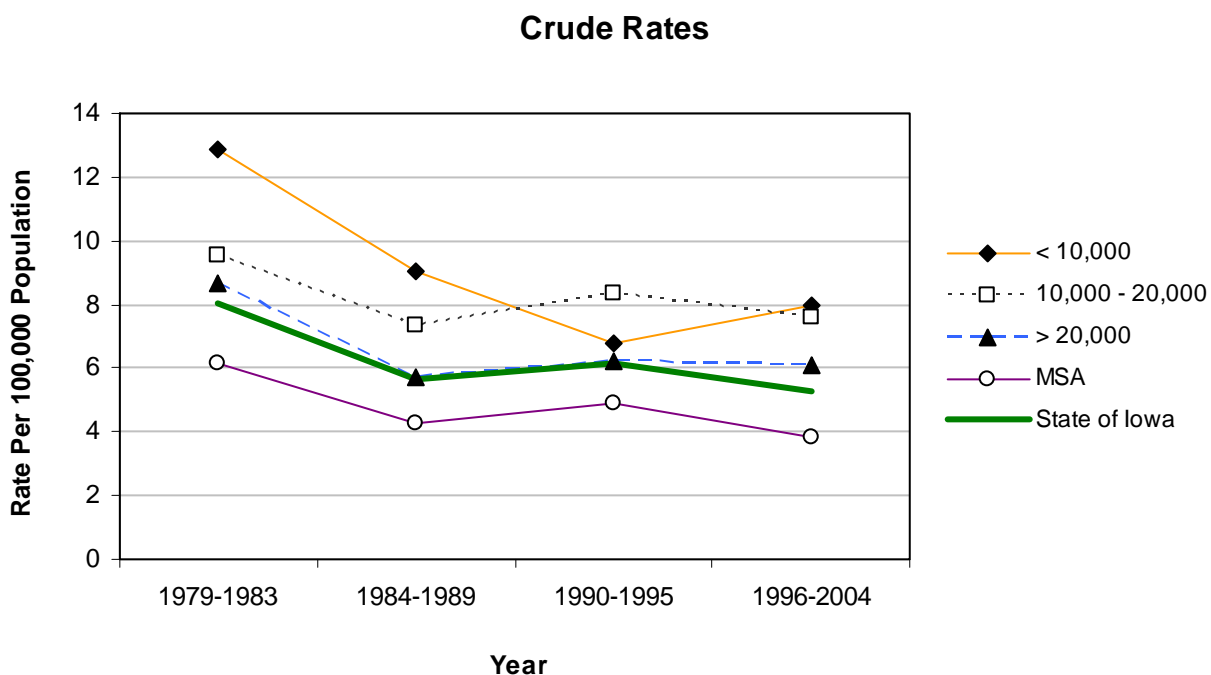
Age 15-19: All Transportation Mortality 1996-2004

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	5	96.0	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	5	64.4	Ringgold	*	*
	Fremont	5	98.4	Taylor	*	*
	Howard	6	93.2	Van Buren	*	*
	Ida	*	*	Wayne	8	189.9
	Lucas	*	*	Worth	*	*
				Total	62	58.8
Counties with Average Population 10,000 – 20,000	Allamakee	7	74.8	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	5	51.2	Iowa	*	*
	Calhoun	*	*	Jefferson	5	46.5
	Cass	5	55.1	Keokuk	5	67.5
	Cedar	*	*	Kossuth	7	57.8
	Cherokee	*	*	Louisa	6	76.0
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	12	97.9	Montgomery	*	*
	Crawford	*	*	O'Brien	*	*
	Delaware	15	111.3	Page	*	*
	Dickinson	*	*	Poweshiek	6	40.5
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	6	59.2	Winnebago	*	*
	Hancock	7	*	Wright	*	*
				Total	148	40.4
Counties with Average Population > 20,000	Boone	8	47.9	Lee	6	25.2
	Buchanan	8	52.9	Mahaska	*	*
	Buena Vista	*	*	Marion	7	30.1
	Carroll	8	52.9	Marshall	6	23.8
	Cerro Gordo	8	26.4	Muscatine	5	18.6
	Clinton	11	33.6	Plymouth	*	*
	Des Moines	6	22.1	Sioux	15	49.7
	Fayette	*	*	Wapello	5	21.8
	Henry	5	37.0	Webster	5	17.6
	Jackson	8	60.0	Winneshiek	*	*
	Jasper	5	23.0	Total	132	29.3
MSA Counties	Benton	5	30.8	Linn	31	25.6
	Black Hawk	13	13.8	Madison	5	53.7
	Bremer	*	*	Mills	*	*
	Dallas	7	27.7	Polk	59	26.5
	Dubuque	6	9.5	Pottawattamie	12	20.7
	Grundy	*	*	Scott	22	21.2
	Guthrie	*	*	Story	6	7.7
	Harrison	5	49.4	Warren	8	26.9
	Johnson	16	16.9	Washington	5	39.6
	Jones	8	64.2	Woodbury	13	18.7
				Total	228	21.4
	State Total	570	28.7			

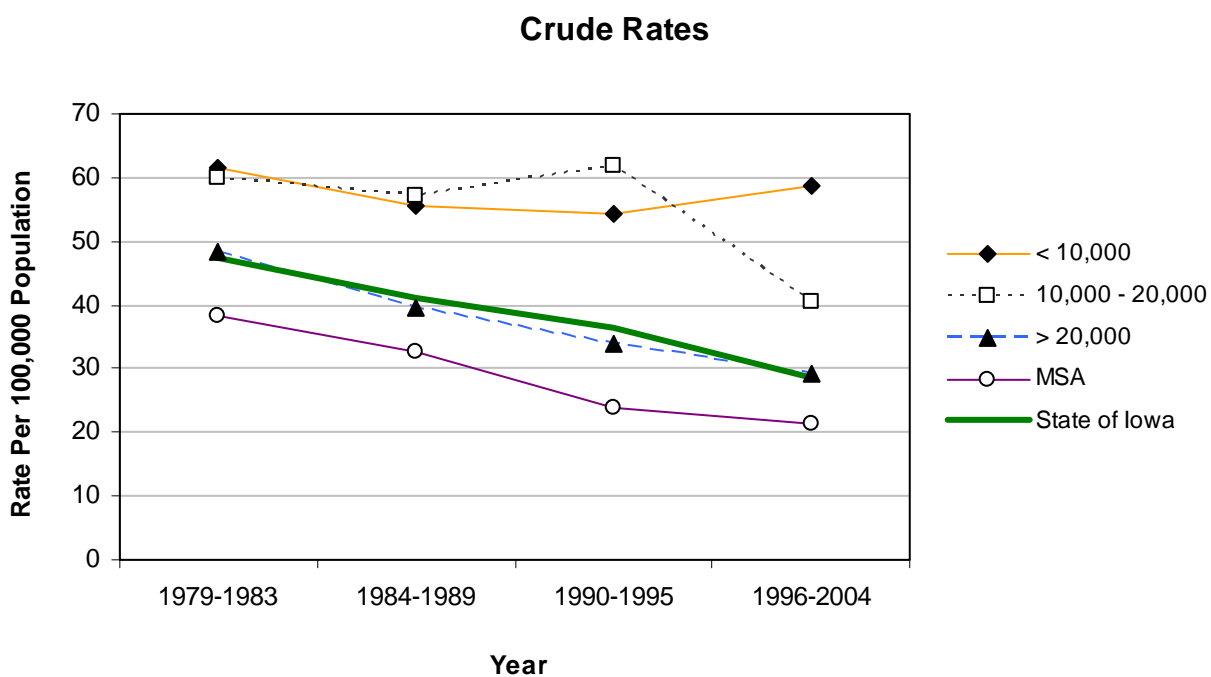
¹Rates per 100,000 Population

Source: State Health Registry of Iowa

Age 0-14: All Transportation Mortality by County Group 1979-2004



Age 15-19: All Transportation Mortality by County Group 1979-2004



Age 0-14: Motor Vehicle Traffic Mortality 1996-2004

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	*	*	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	*	*	Ringgold	*	*
	Fremont	*	*	Taylor	*	*
	Howard	*	*	Van Buren	*	*
	Ida	*	*	Wayne	*	*
	Lucas	*	*	Worth	*	*
				Total	18	6.5
Counties with Average Population 10,000 – 20,000	Allamakee	*	*	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	*	*	Iowa	*	*
	Calhoun	*	*	Jefferson	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	*	*
	Cherokee	6	27.3	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	*	*	Montgomery	*	*
	Crawford	5	16.1	O'Brien	*	*
	Delaware	*	*	Page	*	*
	Dickinson	*	*	Poweshiek	*	*
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	*	*	Winnebago	*	*
	Hancock	*	*	Wright	*	*
				Total	66	6.9
Counties with Average Population > 20,000	Boone	8	17.5	Lee	*	*
	Buchanan	*	*	Mahaska	7	17.2
	Buena Vista	*	*	Marion	*	*
	Carroll	*	*	Marshall	*	*
	Cerro Gordo	*	*	Muscatine	*	*
	Clinton	*	*	Plymouth	*	*
	Des Moines	*	*	Sioux	6	9.8
	Fayette	*	*	Wapello	8	13.0
	Henry	*	*	Webster	*	*
	Jackson	*	*	Winneshiek	*	*
	Jasper	5	7.6	Total	65	5.5
MSA Counties	Benton	*	*	Linn	12	3.4
	Black Hawk	9	4.2	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	*	*	Polk	20	2.8
	Dubuque	*	*	Pottawattamie	*	*
	Grundy	*	*	Scott	7	2.3
	Guthrie	*	*	Story	*	*
	Harrison	*	*	Warren	*	*
	Johnson	*	*	Washington	*	*
	Jones	*	*	Woodbury	15	7.1
				Total	93	3.3
	State Total	242	4.6			

¹Rates per 100,000 Population

Source: State Health Registry of Iowa

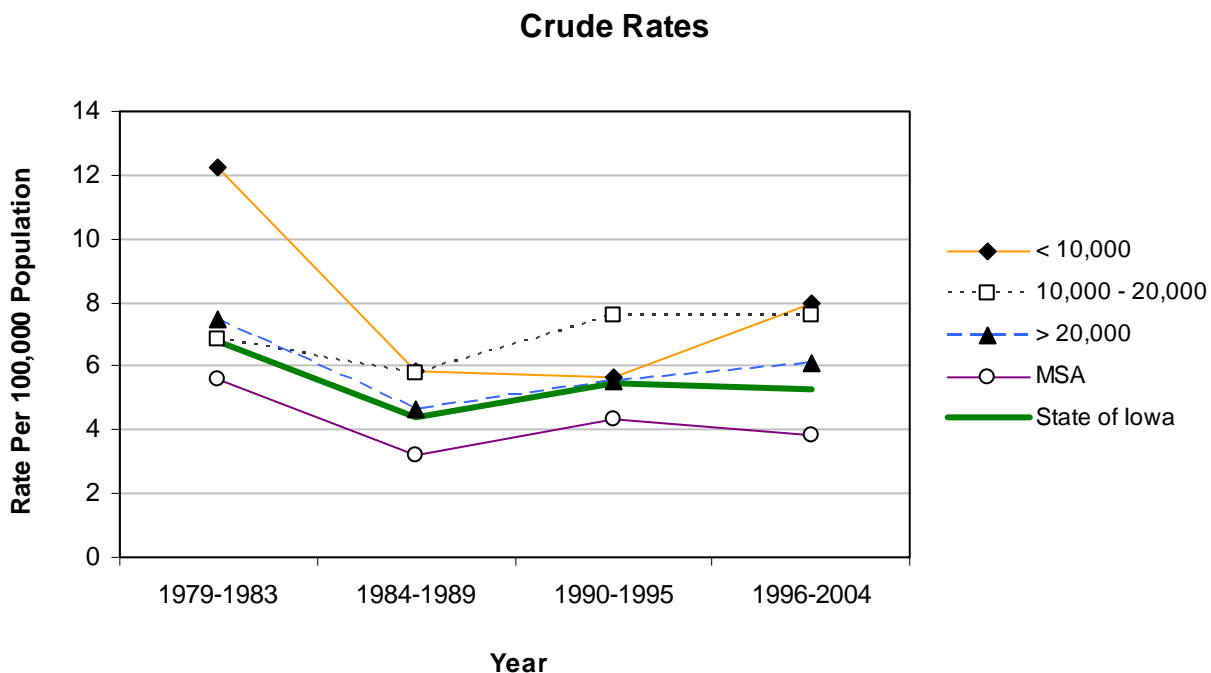
Age 15-19: Motor Vehicle Traffic Mortality 1996-2004

	County	#	Crude ¹	County	#	Crude ¹
Counties with Average Population < 10,000	Adair	5	96.0	Monona	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Palo Alto	*	*
	Davis	*	*	Pocahontas	*	*
	Decatur	5	64.4	Ringgold	*	*
	Fremont	5	98.4	Taylor	*	*
	Howard	6	93.2	Van Buren	*	*
	Ida	*	*	Wayne	8	189.9
	Lucas	*	*	Worth	*	*
				Total	60	56.9
Counties with Average Population 10,000 – 20,000	Allamakee	7	74.8	Hardin	*	*
	Appanoose	*	*	Humboldt	*	*
	Butler	5	51.2	Iowa	*	*
	Calhoun	*	*	Jefferson	5	46.5
	Cass	5	55.1	Keokuk	5	67.5
	Cedar	*	*	Kossuth	7	57.8
	Cherokee	*	*	Louisa	6	76.0
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Mitchell	*	*
	Clayton	12	97.9	Montgomery	*	*
	Crawford	*	*	O'Brien	*	*
	Delaware	15	111.3	Page	*	*
	Dickinson	*	*	Poweshiek	6	40.5
	Emmet	*	*	Sac	*	*
	Floyd	*	*	Shelby	*	*
	Franklin	*	*	Tama	*	*
	Greene	*	*	Union	*	*
	Hamilton	6	59.2	Winnebago	*	*
	Hancock	*	*	Wright	*	*
				Total	145	39.6
Counties with Average Population > 20,000	Boone	8	47.9	Lee	6	25.2
	Buchanan	7	46.3	Mahaska	*	*
	Buena Vista	*	*	Marion	7	30.1
	Carroll	8	52.9	Marshall	6	23.8
	Cerro Gordo	8	26.4	Muscatine	5	18.6
	Clinton	10	30.5	Plymouth	*	*
	Des Moines	6	22.1	Sioux	15	49.7
	Fayette	*	*	Wapello	5	21.8
	Henry	5	37.0	Webster	5	17.6
	Jackson	6	45.0	Winneshiek	*	*
	Jasper	5	23.0	Total	128	28.4
MSA Counties	Benton	*	*	Linn	28	23.1
	Black Hawk	13	13.8	Madison	*	*
	Bremer	*	*	Mills	*	*
	Dallas	7	27.7	Polk	58	26.1
	Dubuque	5	7.9	Pottawattamie	11	19.0
	Grundy	*	*	Scott	22	21.2
	Guthrie	*	*	Story	6	7.7
	Harrison	*	*	Warren	8	26.9
	Johnson	15	15.9	Washington	5	39.6
	Jones	7	56.2	Woodbury	13	18.7
				Total	217	20.4
	State Total	550	27.7			

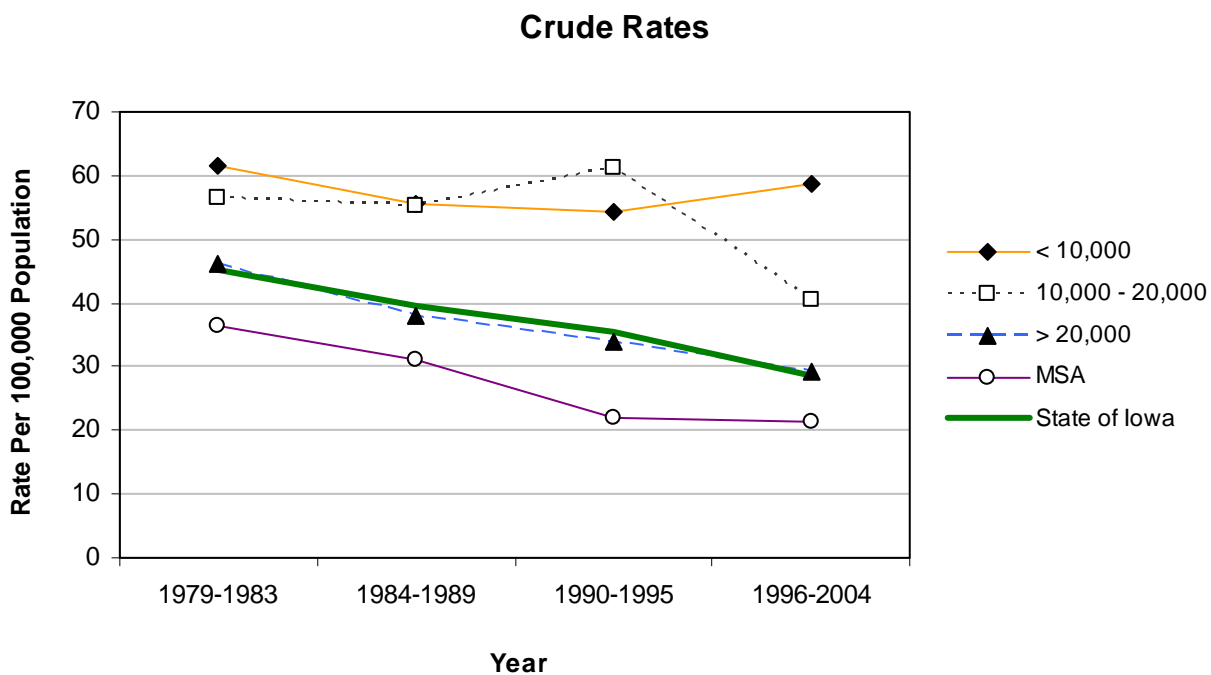
¹Rates per 100,000 Population

Source: State Health Registry of Iowa

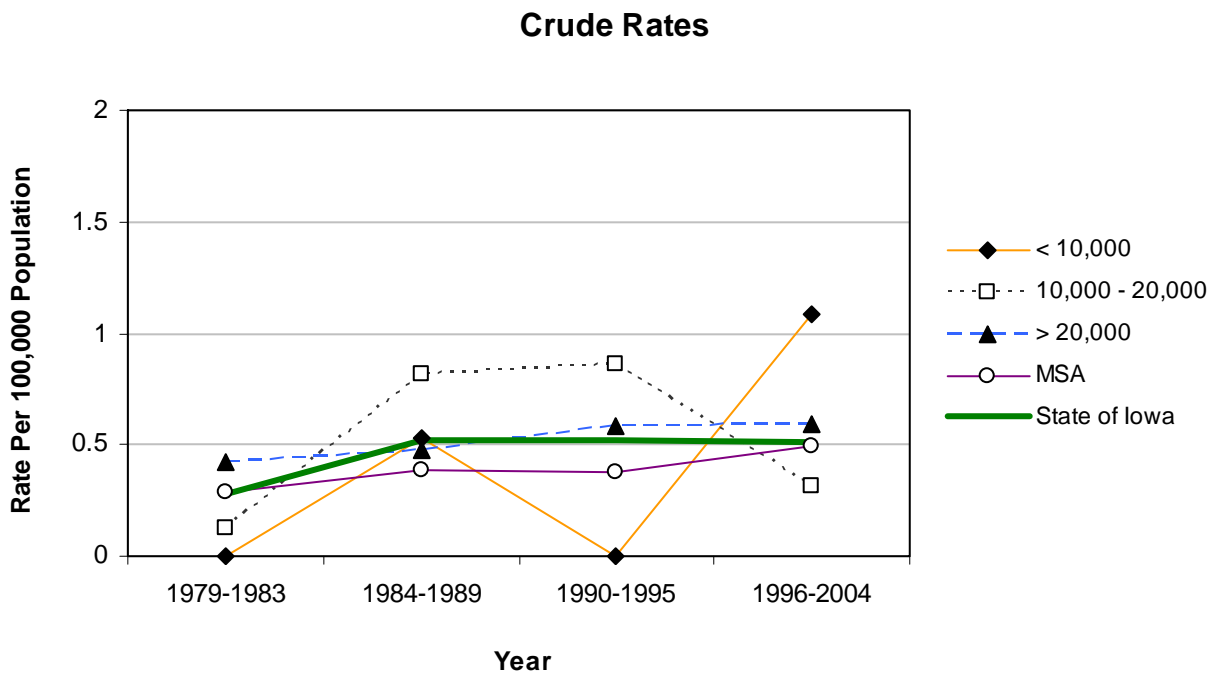
Age 0-14: Motor Vehicle Traffic Mortality by County Group 1979-2004



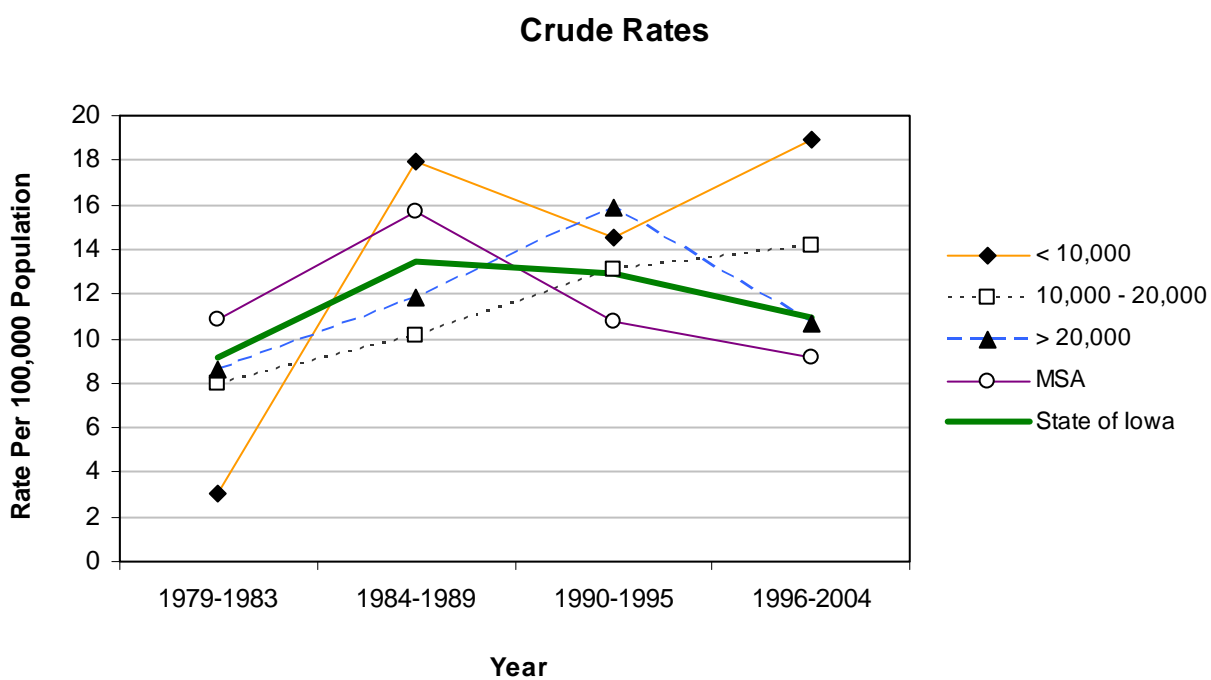
Age 15-19: Motor Vehicle Traffic Mortality by County Group 1979-2004



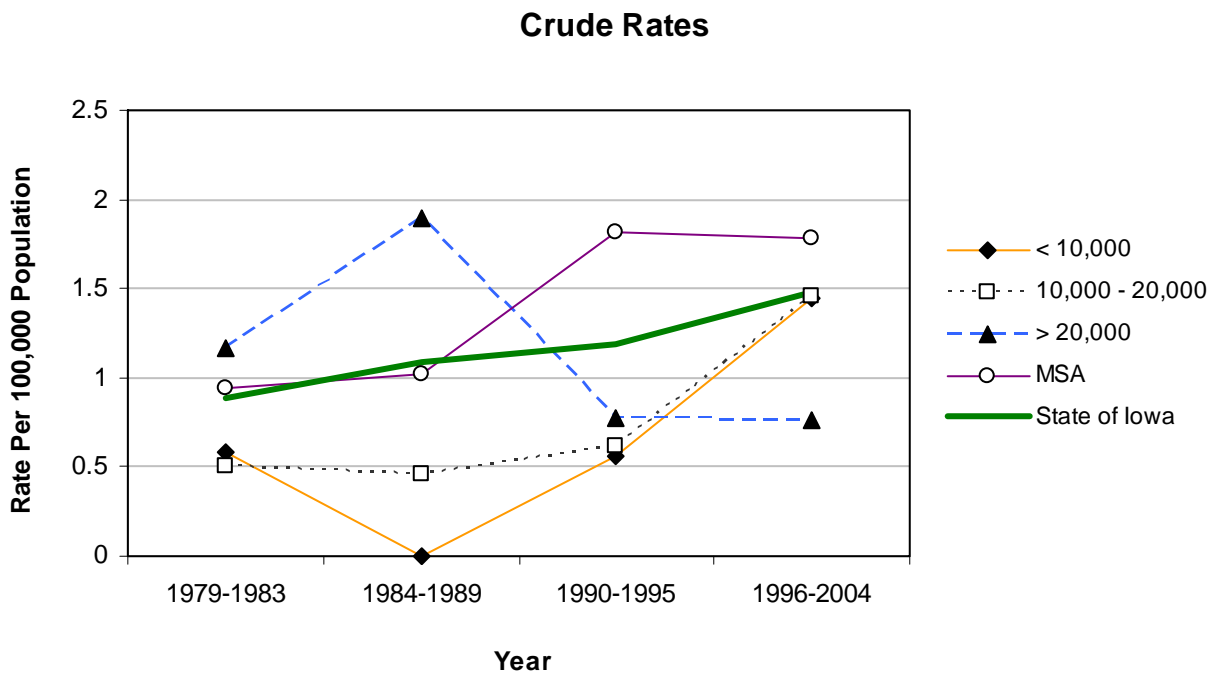
Age 0-14: Suicides by County Group 1979-2004



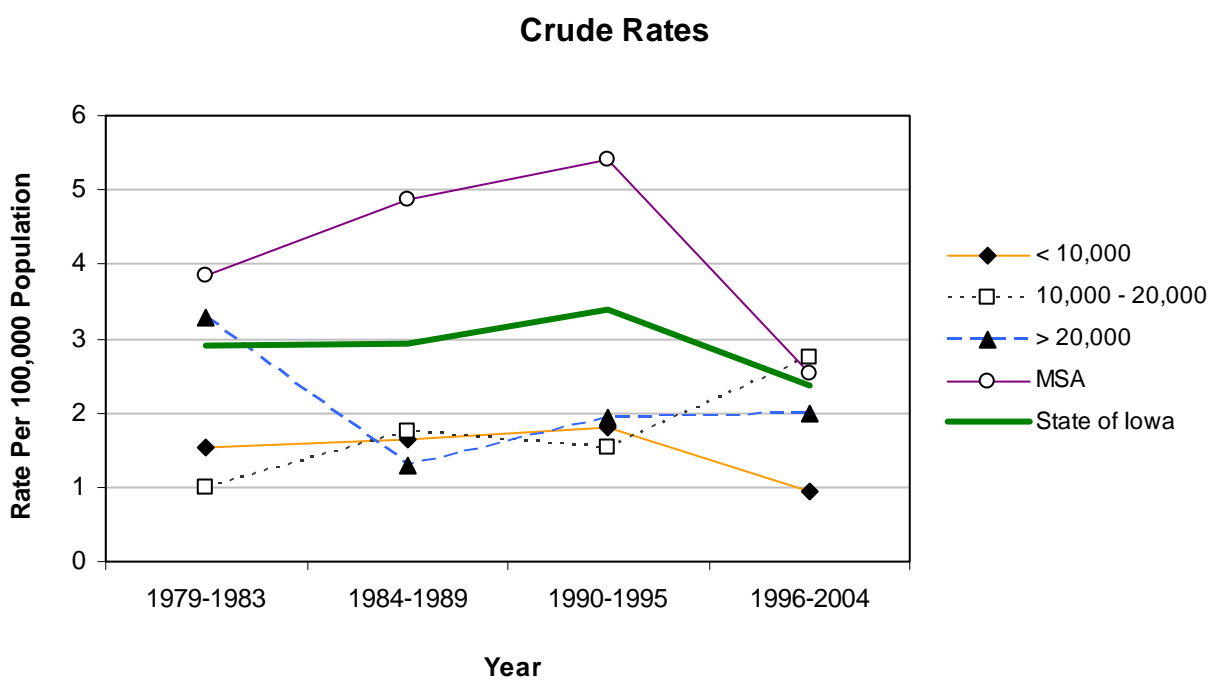
Age 15-19: Suicides by County Group 1979-2004



Age 0-14: Homicides by County Group 1979-2004



Age 15-19: Homicides by County Group 1979-2004



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Other Mortality

With the population aging, chronic disease has become a major determinant of the health of Iowans and the need for health care services in the state.

Heart disease, still the number one cause of death in Iowa, accounted for 290 deaths per 100,000 persons (crude rate) between 1996 and 2004. Using age-adjusted rates, the four county groupings (based on county size) do not vary much, but we do see a consistent decline over time. In the 1978 to 1983 period, the state age-adjusted mortality rate was 365 per 100,000, whereas it has dropped steadily to 231 per 100,000 by the 1996-2004 time period. This represents a 37% decline.

Stroke is currently the third leading cause of death in Iowa, with a crude mortality rate of 75 per 100,000 between 1996 and 2004. From 1978 through 1990, we experienced a steady decline in age-adjusted stroke mortality, but it declined only slightly between 1990-1995 and 1996-2004. The age-adjusted mortality rates for chronic

MAJOR CAUSES OF DEATH IN IOWA...

- ✓ Heart disease
- ✓ Cancer
- ✓ Stroke
- ✓ Chronic obstructive pulmonary disease
- ✓ Unintentional injuries (including MVC)
- ✓ Pneumonia/influenza
- ✓ Diabetes
- ✓ Alzheimer's disease
- ✓ Infectious/parasitic diseases
- ✓ Suicide

obstructive pulmonary disease, currently the fourth leading cause of death, have been increasing across time with the larger counties experiencing the highest rates. The fifth leading cause, unintentional injuries, includes motor vehicle collisions (MVC). Death from pneumonia and influenza, the sixth leading cause of death, shows little overall change over time, when adjusted for age, but crude rates indicate a greater problem in the smaller counties, due to their larger proportion of elderly. The smaller counties are also exhibiting a greater problem with mortality due to diabetes, kidney diseases (nephritis, nephritic syndrome, and nephrosis), and Alzheimer's disease, based upon crude mortality rates, which when compared to the age-adjusted rates indicate this is primarily due to their larger proportion of elderly.

These data were obtained from death certificates filed at the Iowa Department of Public Health via the National Center for Health Statistics and the SEER*Stat software program provided by the National Cancer Institute.

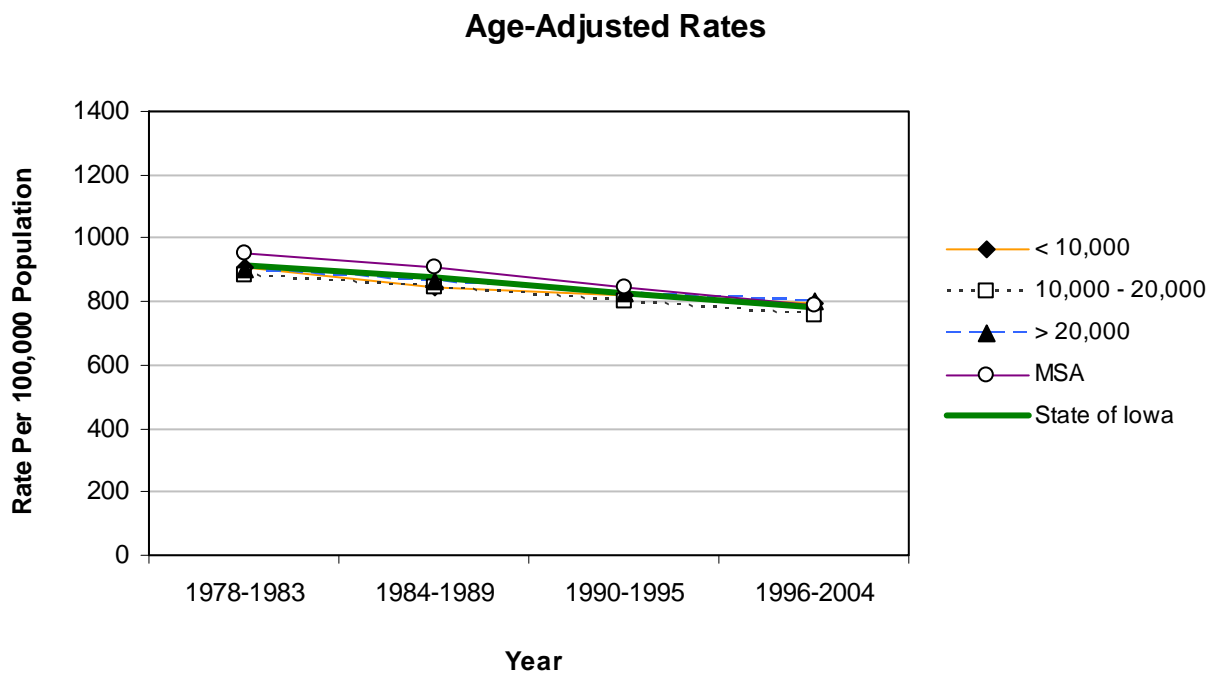
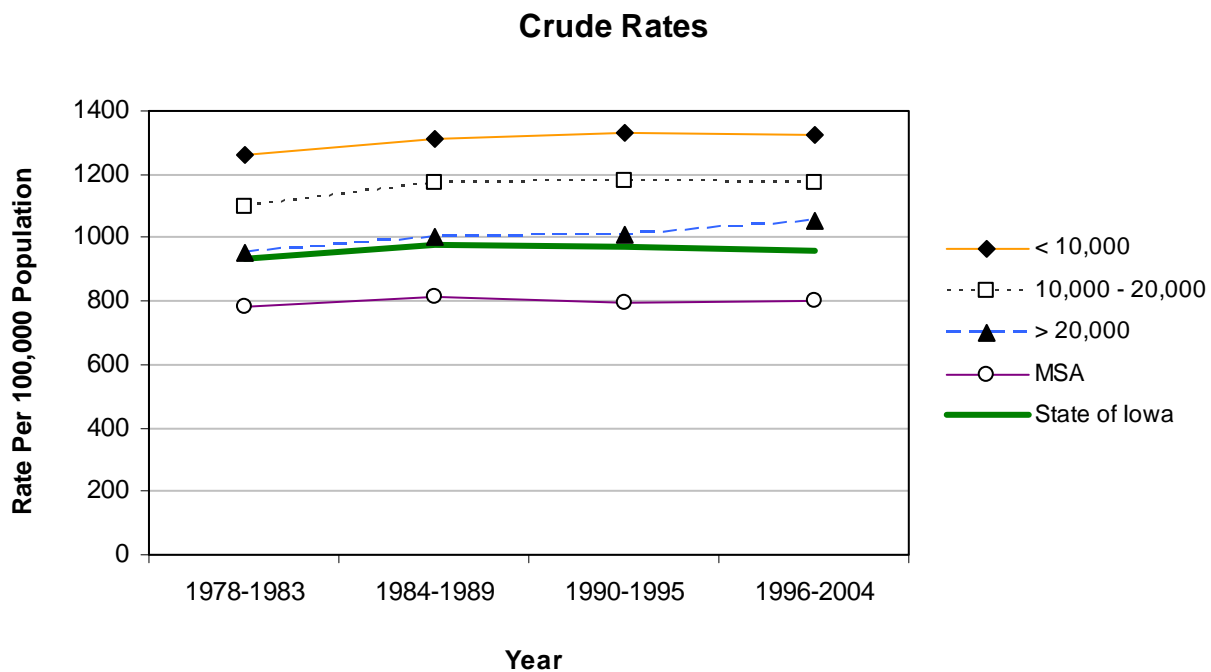
All Causes Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	1,057	1439.0 (05)	768.6 (52)	Monona	1,492	1669.4 (01)	859.7 (06)
	Adams	524	1310.4 (21)	791.4 (36)	Monroe	907	1262.7 (30)	838.5 (18)
	Audubon	843	1389.4 (08)	712.5 (84)	Osceola	747	1189.1 (40)	780.0 (45)
	Clarke	873	1076.3 (62)	742.0 (68)	Palo Alto	1,238	1368.8 (10)	809.9 (28)
	Davis	850	1104.0 (57)	764.4 (56)	Pocahontas	1,021	1320.2 (18)	765.2 (53)
	Decatur	911	1178.8 (46)	807.3 (29)	Ringgold	746	1532.2 (03)	799.4 (31)
	Fremont	959	1343.3 (15)	856.7 (07)	Taylor	872	1403.7 (07)	768.8 (51)
	Howard	1,162	1303.2 (22)	782.7 (43)	Van Buren	908	1300.7 (23)	844.5 (14)
	Ida	931	1330.0 (17)	801.3 (30)	Wayne	955	1573.5 (02)	854.9 (08)
	Lucas	1,024	1204.3 (36)	763.9 (57)	Worth	933	1318.5 (19)	817.9 (22)
					Total	18,953	1326.3	796.5
Counties with Average Population 10,000 – 20,000	Allamakee	1,485	1132.9 (51)	751.8 (66)	Hardin	2,272	1351.8 (11)	781.1 (44)
	Appanoose	1,618	1316.3 (20)	821.0 (20)	Humboldt	1,094	1179.1 (45)	710.9 (86)
	Butler	1,736	1264.8 (29)	770.9 (50)	Iowa	1,520	1077.3 (61)	731.7 (74)
	Calhoun	1,375	1383.5 (09)	750.7 (67)	Jefferson	1,354	926.1 (82)	757.3 (62)
	Cass	1,764	1340.8 (16)	789.7 (37)	Keokuk	1,213	1184.0 (42)	740.4 (69)
	Cedar	1,604	982.6 (75)	710.7 (87)	Kossuth	1,757	1147.5 (48)	714.6 (82)
	Cherokee	1,491	1277.6 (25)	795.3 (34)	Louisa	979	895.7 (88)	757.0 (64)
	Chickasaw	1,281	1091.9 (59)	765.0 (55)	Lyon	1,092	1031.5 (70)	683.3 (96)
	Clay	1,619	1038.8 (67)	714.3 (83)	Mitchell	1,264	1290.5 (24)	710.7 (87)
	Clayton	2,009	1196.8 (38)	814.4 (25)	Montgomery	1,509	1440.3 (04)	853.9 (09)
	Crawford	1,560	1025.4 (71)	729.7 (75)	O'Brien	1,671	1233.8 (33)	708.0 (89)
	Delaware	1,383	838.9 (91)	688.9 (93)	Page	2,047	1346.1 (14)	837.5 (19)
	Dickinson	1,627	1108.3 (56)	704.4 (90)	Poweshiek	1,994	1171.9 (47)	789.1 (38)
	Emmet	1,205	1216.2 (35)	758.2 (61)	Sac	1,465	1422.7 (06)	783.4 (41)
	Floyd	1,854	1225.7 (34)	759.2 (60)	Shelby	1,407	1195.5 (39)	725.0 (79)
	Franklin	1,208	1245.0 (31)	774.1 (47)	Tama	1,846	1141.0 (50)	755.7 (65)
	Greene	1,245	1348.2 (12)	761.8 (58)	Union	1,404	1274.7 (26)	841.3 (16)
	Hamilton	1,579	1073.7 (63)	738.6 (70)	Winnebago	1,258	1201.5 (37)	737.0 (72)
	Hancock	1,140	1056.3 (66)	699.7 (92)	Wright	1,726	1348.2 (12)	757.3 (62)
					Total	57,655	1175.1	754.4
Counties with Average Population > 20,000	Boone	2,629	1118.0 (53)	819.0 (21)	Lee	3,898	1145.7 (49)	867.4 (05)
	Buchanan	1,833	968.6 (76)	815.6 (23)	Mahaska	1,917	958.3 (78)	727.7 (77)
	Buena Vista	1,845	1008.0 (72)	719.8 (81)	Marion	2,982	1033.3 (69)	783.8 (40)
	Carroll	2,123	1103.3 (58)	722.0 (80)	Marshall	4,492	1270.9 (28)	962.9 (01)
	Cerro Gordo	4,693	1130.1 (52)	814.5 (24)	Muscatine	3,399	904.4 (86)	844.0 (15)
	Clinton	4,894	1083.4 (60)	853.2 (10)	Plymouth	2,208	990.5 (74)	760.9 (59)
	Des Moines	3,920	1036.1 (68)	775.4 (46)	Sioux	2,248	787.6 (94)	634.0 (99)
	Fayette	2,320	1179.5 (44)	773.0 (49)	Wapello	3,839	1186.2 (41)	852.4 (11)
	Henry	1,816	998.7 (73)	783.3 (42)	Webster	4,230	1183.1 (43)	849.1 (12)
	Jackson	1,955	1073.1 (64)	786.2 (39)	Winneshiek	1,646	861.5 (90)	653.6 (98)
	Jasper	3,120	935.5 (80)	738.1 (71)	Total	62,007	1054.9	798.9
MSA Counties	Benton	2,042	891.6 (89)	711.4 (85)	Linn	12,856	747.5 (96)	735.8 (73)
	Black Hawk	10,316	902.1 (87)	792.8 (35)	Madison	1,344	1059.6 (65)	812.1 (26)
	Bremer	1,975	939.4 (79)	683.4 (95)	Mills	1,208	926.0 (83)	885.8 (03)
	Dallas	2,810	750.9 (95)	795.5 (33)	Polk	25,095	742.6 (97)	798.5 (32)
	Dubuque	7,502	931.6 (81)	773.2 (48)	Pottawattamie	7,552	960.8 (77)	909.0 (02)
	Grundy	1,239	1116.4 (54)	700.0 (91)	Scott	11,642	816.1 (92)	845.0 (13)
	Guthrie	1,272	1243.6 (32)	765.2 (53)	Story	4,099	574.8 (98)	655.2 (97)
	Harrison	1,786	1271.4 (27)	885.0 (04)	Warren	2,949	804.0 (93)	810.1 (27)
	Johnson	4,559	456.5 (99)	686.6 (94)	Washington	2,078	1108.8 (55)	726.9 (78)
	Jones	1,682	917.5 (84)	728.2 (76)	Woodbury	8,473	908.8 (85)	839.1 (17)
					Total	112,479	799.6	785.7
	State Total	251,094	955.5	781.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

All Causes Mortality by County Group 1978-2004



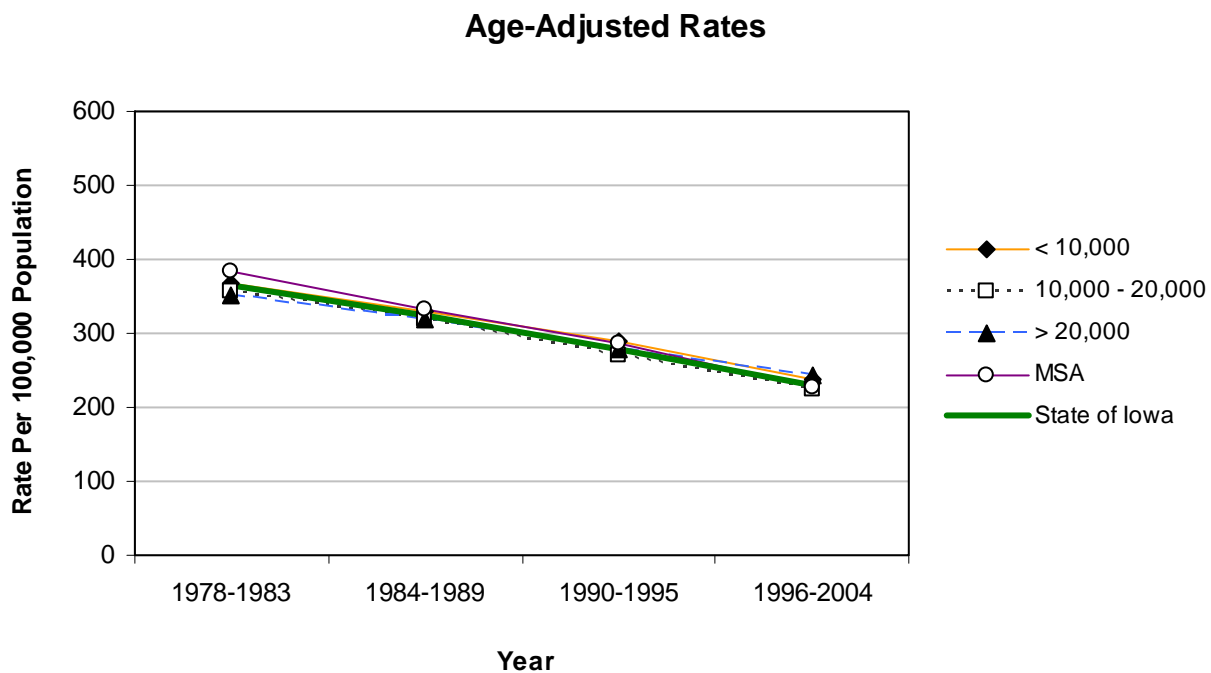
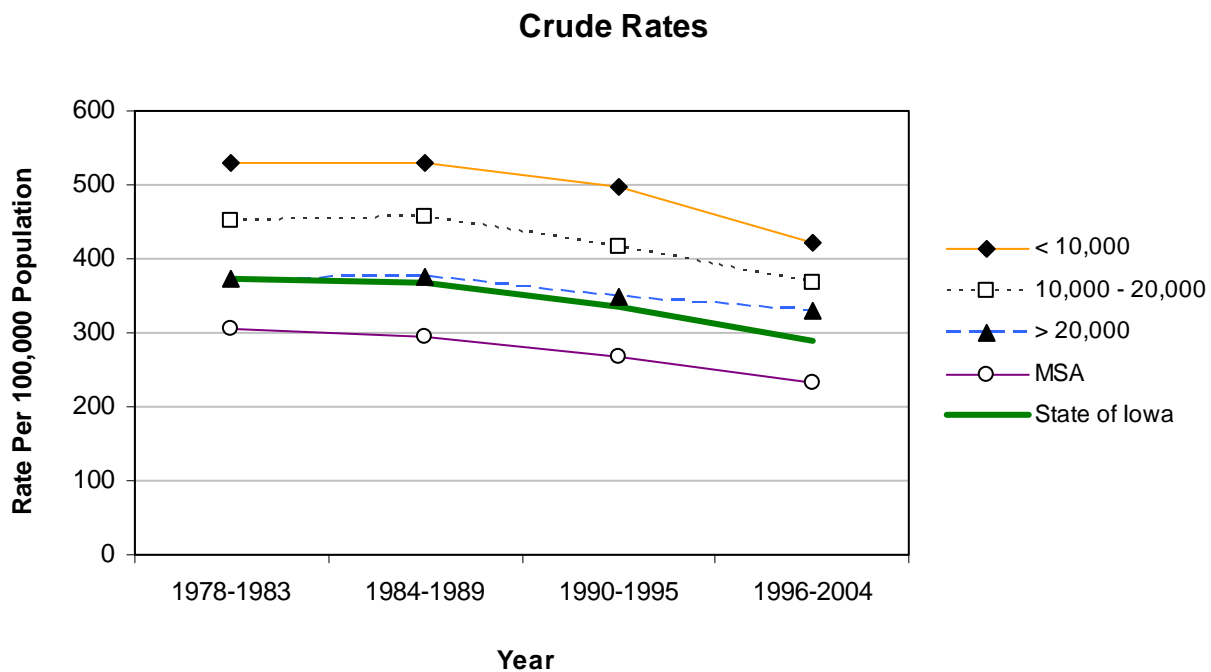
Heart Disease Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	325	442.4 (14)	227.3 (51)	Monona	441	493.4 (06)	230.7 (44)
	Adams	163	407.6 (23)	231.4 (42)	Monroe	290	403.7 (24)	252.4 (21)
	Audubon	222	365.9 (40)	184.6 (94)	Osceola	347	552.4 (02)	329.8 (02)
	Clarke	296	364.9 (41)	239.1 (36)	Palo Alto	321	354.9 (47)	194.5 (84)
	Davis	258	335.1 (58)	214.5 (72)	Pocahontas	298	385.3 (33)	213.6 (73)
	Decatur	300	388.2 (29)	248.7 (23)	Ringgold	258	529.9 (03)	260.0 (14)
	Fremont	254	355.8 (46)	218.2 (62)	Taylor	276	444.3 (13)	229.7 (46)
	Howard	343	384.7 (34)	229.0 (47)	Van Buren	290	415.4 (19)	260.6 (13)
	Ida	340	485.7 (08)	270.3 (09)	Wayne	303	499.3 (05)	258.6 (16)
	Lucas	399	469.2 (10)	272.1 (08)	Worth	299	422.5 (17)	244.8 (26)
					Total	6,023	421.5	238.0
Counties with Average Population 10,000 – 20,000	Allamakee	371	283.0 (82)	183.1 (95)	Hardin	812	483.1 (09)	263.7 (12)
	Appanoose	726	590.6 (01)	338.5 (01)	Humboldt	348	375.1 (37)	212.9 (75)
	Butler	518	377.4 (35)	216.5 (66)	Iowa	418	296.2 (76)	190.2 (88)
	Calhoun	385	387.4 (30)	201.1 (82)	Jefferson	417	285.2 (80)	222.9 (58)
	Cass	527	400.6 (26)	221.3 (61)	Keokuk	354	345.5 (55)	202.6 (81)
	Cedar	448	274.4 (84)	191.0 (87)	Kossuth	458	299.1 (72)	179.8 (96)
	Cherokee	491	420.7 (18)	252.6 (20)	Louisa	289	264.4 (86)	216.3 (67)
	Chickasaw	458	390.4 (28)	258.2 (17)	Lyon	360	340.1 (57)	215.8 (69)
	Clay	454	291.3 (78)	193.4 (85)	Mitchell	481	491.1 (07)	241.6 (31)
	Clayton	562	334.8 (59)	218.2 (62)	Montgomery	410	391.3 (27)	213.4 (74)
	Crawford	474	311.6 (68)	214.6 (71)	O'Brien	554	409.1 (21)	217.8 (64)
	Delaware	408	247.5 (89)	197.8 (83)	Page	621	408.4 (22)	239.4 (34)
	Dickinson	519	353.5 (50)	211.2 (78)	Poweshiek	610	358.5 (43)	227.4 (50)
	Emmet	370	373.4 (38)	222.1 (60)	Sac	438	425.3 (16)	222.6 (59)
	Floyd	607	401.3 (25)	236.0 (37)	Shelby	487	413.8 (20)	231.9 (41)
	Franklin	375	386.5 (32)	232.8 (39)	Tama	555	343.0 (56)	211.7 (76)
	Greene	422	457.0 (12)	241.4 (32)	Union	559	507.5 (04)	304.4 (04)
	Hamilton	525	357.0 (45)	232.8 (39)	Winnebago	394	376.3 (36)	211.4 (77)
	Hancock	383	354.9 (47)	223.0 (57)	Wright	447	349.1 (53)	185.1 (92)
					Total	18,035	367.6	223.0
Counties with Average Population > 20,000	Boone	868	369.1 (39)	253.1 (19)	Lee	1,205	354.2 (49)	259.9 (15)
	Buchanan	570	301.2 (71)	246.1 (25)	Mahaska	619	309.4 (70)	225.2 (55)
	Buena Vista	579	316.3 (67)	214.8 (70)	Marion	854	295.9 (77)	217.5 (65)
	Carroll	629	326.9 (63)	203.3 (79)	Marshall	1,262	357.1 (44)	264.4 (11)
	Cerro Gordo	1,460	351.6 (52)	244.6 (27)	Muscatine	929	247.2 (90)	228.8 (48)
	Clinton	1,932	427.7 (15)	325.6 (03)	Plymouth	742	332.9 (60)	243.1 (29)
	Des Moines	1,179	311.6 (68)	226.8 (54)	Sioux	677	237.2 (92)	184.8 (93)
	Fayette	695	353.3 (51)	223.6 (56)	Wapello	1,178	364.0 (42)	256.0 (18)
	Henry	586	322.3 (65)	244.0 (28)	Webster	1,384	387.1 (31)	267.3 (10)
	Jackson	631	346.4 (54)	241.9 (30)	Winneshiek	463	242.3 (91)	179.2 (97)
	Jasper	988	296.3 (75)	228.0 (49)	Total	19,430	330.5	242.1
MSA Counties	Benton	757	330.5 (61)	251.2 (22)	Linn	3,273	190.3 (97)	185.5 (91)
	Black Hawk	3,024	264.4 (86)	226.9 (52)	Madison	318	250.7 (88)	186.6 (89)
	Bremer	688	327.2 (62)	226.9 (52)	Mills	380	291.3 (78)	275.2 (07)
	Dallas	824	220.2 (96)	230.9 (43)	Polk	7,490	221.6 (95)	239.3 (35)
	Dubuque	2,387	296.4 (74)	240.5 (33)	Pottawattamie	2,345	298.4 (73)	281.7 (06)
	Grundy	361	325.3 (64)	191.9 (86)	Scott	3,219	225.6 (94)	234.1 (38)
	Guthrie	286	279.6 (83)	172.3 (98)	Story	1,181	165.6 (98)	186.4 (90)
	Harrison	645	459.1 (11)	295.8 (05)	Warren	843	229.8 (93)	230.2 (45)
	Johnson	1,087	108.9 (99)	166.5 (99)	Washington	604	322.3 (65)	202.9 (80)
	Jones	520	283.6 (81)	216.1 (68)	Woodbury	2,549	273.4 (85)	248.2 (24)
					Total	32,781	233.0	226.9
	State Total	76,269	290.2	230.7				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Heart Disease Mortality by County Group 1978-2004



Stroke Mortality 1996-2004

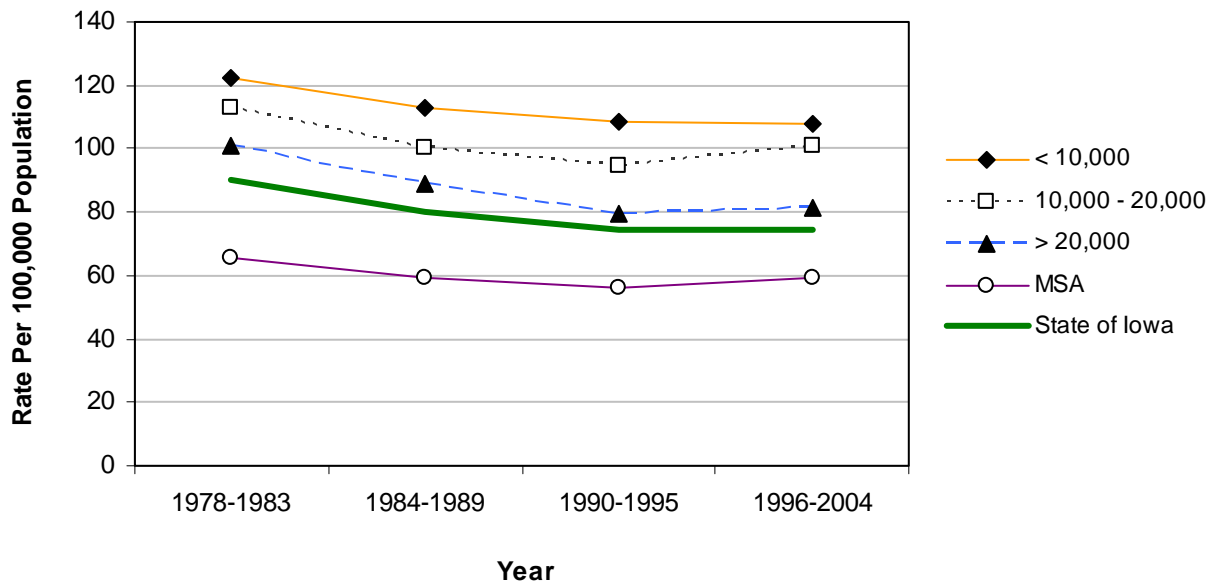
	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	69	93.9 (41)	42.8 (92)	Monona	109	122.0 (14)	54.3 (54)
	Adams	39	97.5 (40)	54.1 (55)	Monroe	74	103.0 (31)	60.0 (35)
	Audubon	73	120.3 (16)	53.4 (59)	Osceola	58	92.3 (44)	54.8 (50)
	Clarke	68	83.8 (54)	53.7 (57)	Palo Alto	116	128.3 (10)	65.4 (23)
	Davis	72	93.5 (43)	58.7 (37)	Pocahontas	107	138.4 (05)	68.2 (13)
	Decatur	64	82.8 (59)	53.5 (58)	Ringgold	49	100.6 (36)	51.4 (67)
	Fremont	91	127.5 (12)	71.5 (10)	Taylor	64	103.0 (31)	49.0 (76)
	Howard	96	107.7 (26)	56.0 (47)	Van Buren	78	111.7 (22)	63.7 (27)
	Ida	70	100.0 (37)	54.6 (51)	Wayne	93	153.2 (02)	68.0 (15)
	Lucas	53	62.3 (86)	37.8 (98)	Worth	102	144.1 (03)	78.9 (03)
					Total	1,545	108.1	57.5
Counties with Average Population 10,000 – 20,000	Allamakee	159	121.3 (15)	74.0 (08)	Hardin	188	111.9 (21)	57.0 (44)
	Appanoose	102	83.0 (57)	47.5 (85)	Humboldt	68	73.3 (75)	40.3 (96)
	Butler	183	133.3 (07)	73.4 (09)	Iowa	160	113.4 (17)	67.8 (16)
	Calhoun	131	131.8 (08)	63.0 (29)	Jefferson	154	105.3 (29)	79.9 (02)
	Cass	172	130.7 (09)	68.1 (14)	Keokuk	85	83.0 (57)	47.6 (84)
	Cedar	172	105.4 (28)	66.6 (18)	Kossuth	166	108.4 (25)	61.2 (32)
	Cherokee	131	112.2 (19)	62.8 (30)	Louisa	87	79.6 (65)	62.4 (31)
	Chickasaw	91	77.6 (70)	48.9 (77)	Lyon	110	103.9 (30)	63.3 (28)
	Clay	130	83.4 (55)	51.9 (64)	Mitchell	109	111.3 (23)	54.6 (51)
	Clayton	186	110.8 (24)	69.8 (12)	Montgomery	179	170.9 (01)	87.3 (01)
	Crawford	106	69.7 (81)	47.5 (85)	O'Brien	124	91.6 (46)	47.9 (83)
	Delaware	95	57.6 (90)	44.6 (90)	Page	155	101.9 (35)	57.0 (44)
	Dickinson	128	87.2 (50)	50.6 (71)	Poweshiek	218	128.1 (11)	78.5 (04)
	Emmet	76	76.7 (71)	42.7 (93)	Sac	145	140.8 (04)	66.0 (20)
	Floyd	138	91.2 (47)	51.4 (67)	Shelby	89	75.6 (73)	41.0 (95)
	Franklin	99	102.0 (34)	58.6 (39)	Tama	129	79.7 (63)	47.2 (88)
	Greene	126	136.4 (06)	64.1 (25)	Union	89	80.8 (61)	48.3 (81)
	Hamilton	75	51.0 (95)	34.0 (99)	Winnebago	128	122.3 (13)	65.7 (22)
	Hancock	106	98.2 (39)	57.8 (42)	Wright	145	113.3 (18)	53.8 (56)
					Total	4,934	100.6	58.0
Counties with Average Population > 20,000	Boone	184	78.2 (69)	53.3 (60)	Lee	270	79.4 (66)	56.4 (46)
	Buchanan	120	63.4 (85)	51.2 (69)	Mahaska	136	68.0 (82)	47.3 (87)
	Buena Vista	140	76.5 (72)	48.7 (79)	Marion	233	80.7 (62)	55.1 (49)
	Carroll	168	87.3 (49)	50.5 (72)	Marshall	299	84.6 (52)	60.9 (33)
	Cerro Gordo	466	112.2 (19)	74.7 (06)	Muscatine	264	70.2 (80)	64.1 (25)
	Clinton	328	72.6 (76)	54.6 (51)	Plymouth	161	72.2 (77)	50.8 (70)
	Des Moines	322	85.1 (51)	59.2 (36)	Sioux	164	57.5 (91)	43.7 (91)
	Fayette	196	99.6 (38)	58.6 (39)	Wapello	331	102.3 (33)	66.2 (19)
	Henry	195	107.2 (27)	75.1 (05)	Webster	317	88.7 (48)	58.4 (41)
	Jackson	131	71.9 (78)	48.6 (80)	Winneshiek	143	74.8 (74)	51.8 (65)
	Jasper	216	64.8 (84)	48.3 (81)	Total	4,784	81.4	57.1
MSA Counties	Benton	115	50.2 (96)	39.5 (97)	Linn	886	51.5 (94)	49.8 (74)
	Black Hawk	961	84.0 (53)	69.9 (11)	Madison	104	82.0 (60)	57.5 (43)
	Bremer	167	79.4 (66)	55.4 (48)	Mills	69	52.9 (93)	49.4 (75)
	Dallas	216	57.7 (89)	60.3 (34)	Polk	1,581	46.8 (97)	50.4 (73)
	Dubuque	669	83.1 (56)	65.8 (21)	Pottawattamie	487	62.0 (87)	58.7 (37)
	Grundy	104	93.7 (42)	52.4 (63)	Scott	1,024	71.8 (79)	74.5 (07)
	Guthrie	94	91.9 (45)	51.8 (65)	Story	316	44.3 (98)	48.9 (77)
	Harrison	112	79.7 (63)	52.7 (61)	Warren	245	66.8 (83)	66.8 (17)
	Johnson	416	41.7 (99)	64.4 (24)	Washington	147	78.4 (68)	47.0 (89)
	Jones	105	57.3 (92)	42.2 (94)	Woodbury	548	58.8 (88)	52.6 (62)
					Total	8,366	59.5	57.1
	State Total	19,629	74.7	57.4				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

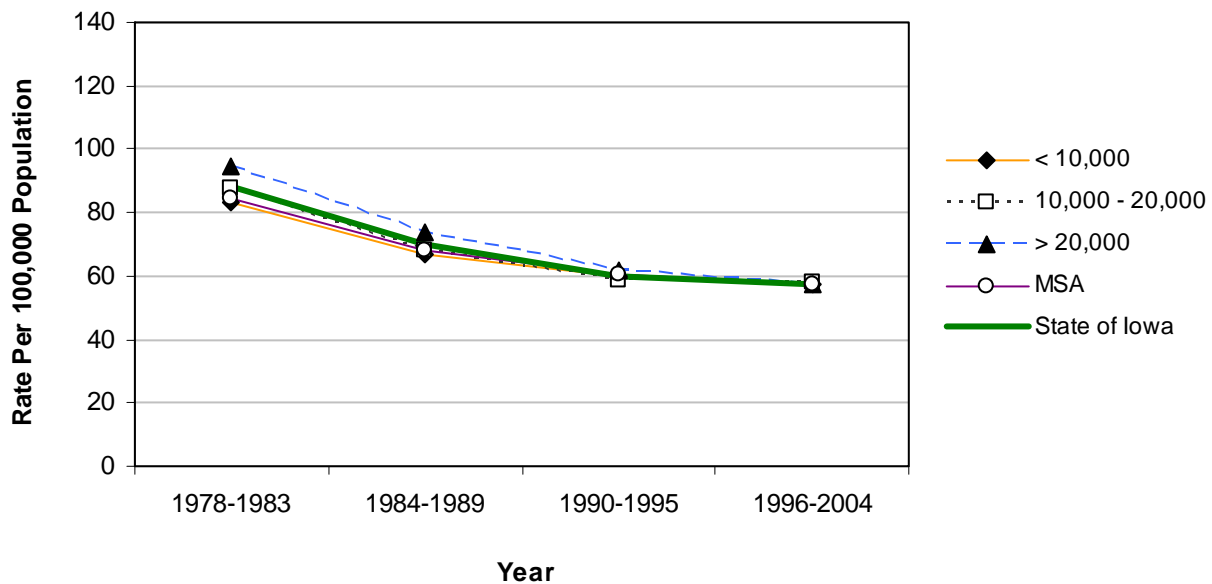
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Stroke Mortality by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



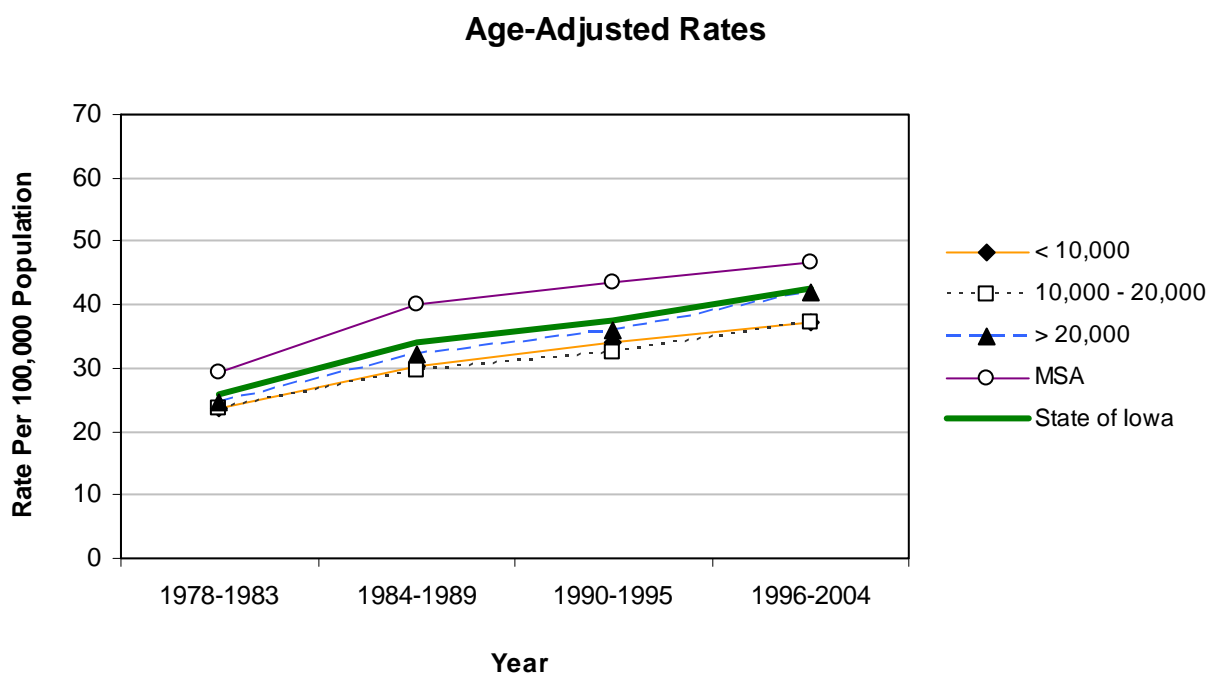
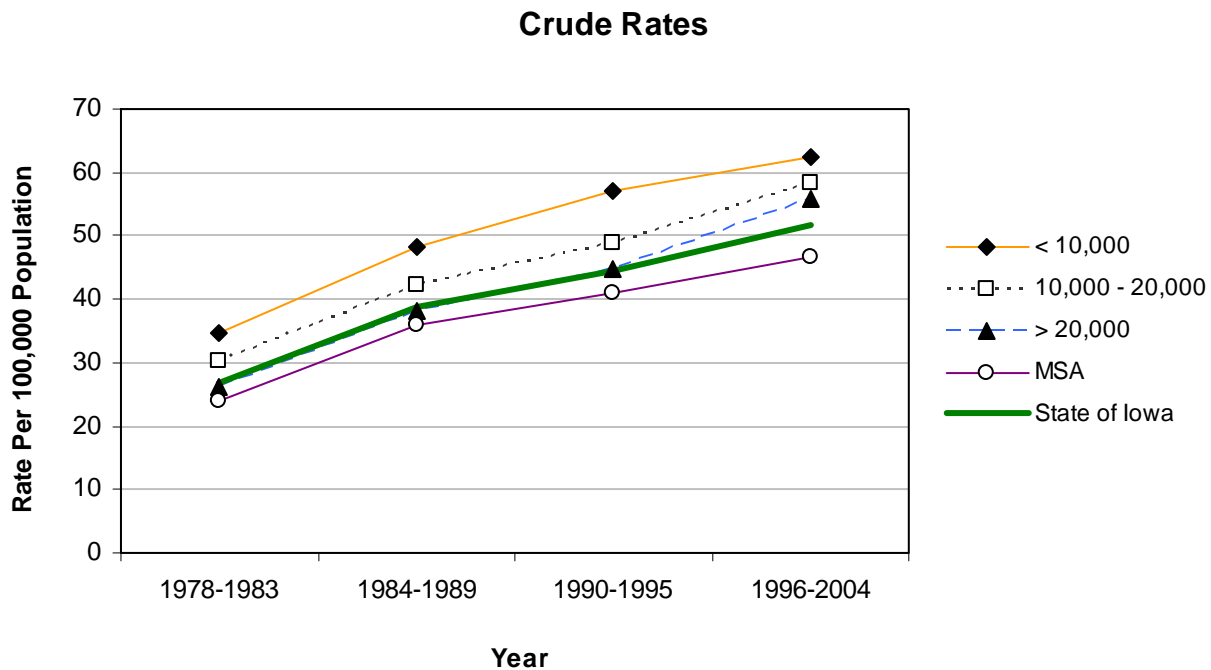
Chronic Obstructive Pulmonary Disease Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	33	44.9 (82)	25.2 (94)	Monona	86	96.2 (04)	50.8 (11)
	Adams	22	55.0 (47)	32.8 (74)	Monroe	56	78.0 (11)	50.1 (14)
	Audubon	45	74.2 (12)	36.0 (57)	Osceola	16	25.5 (97)	16.0 (99)
	Clarke	39	48.1 (69)	34.4 (66)	Palo Alto	74	81.8 (09)	46.1 (22)
	Davis	37	48.1 (69)	31.2 (80)	Pocahontas	42	54.3 (50)	30.9 (82)
	Decatur	37	47.9 (71)	34.8 (64)	Ringgold	36	73.9 (13)	36.9 (54)
	Fremont	67	93.8 (05)	57.9 (06)	Taylor	60	96.6 (03)	49.3 (19)
	Howard	44	49.3 (64)	29.0 (89)	Van Buren	32	45.8 (79)	29.2 (86)
	Ida	50	71.4 (17)	40.3 (38)	Wayne	37	61.0 (34)	33.7 (69)
	Lucas	45	52.9 (57)	35.1 (63)	Worth	35	49.5 (63)	31.5 (79)
					Total	893	62.5	37.1
Counties with Average Population 10,000 – 20,000	Allamakee	59	45.0 (81)	29.6 (84)	Hardin	98	58.3 (39)	33.5 (70)
	Appanoose	58	47.2 (74)	29.4 (85)	Humboldt	76	81.9 (08)	47.8 (20)
	Butler	88	64.1 (27)	38.9 (46)	Iowa	68	48.2 (68)	33.4 (71)
	Calhoun	66	66.4 (22)	35.6 (60)	Jefferson	47	32.1 (95)	28.5 (91)
	Cass	128	97.3 (02)	58.7 (05)	Keokuk	64	62.5 (31)	37.8 (50)
	Cedar	92	56.4 (42)	41.1 (34)	Kossuth	75	49.0 (66)	28.6 (90)
	Cherokee	62	53.1 (55)	32.6 (77)	Louisa	43	39.3 (91)	34.7 (65)
	Chickasaw	69	58.8 (36)	40.1 (40)	Lyon	41	38.7 (92)	25.5 (93)
	Clay	114	73.1 (14)	49.9 (15)	Mitchell	45	45.9 (78)	24.9 (96)
	Clayton	96	57.2 (41)	37.3 (53)	Montgomery	102	97.4 (01)	59.4 (04)
	Crawford	100	65.7 (23)	45.6 (25)	O'Brien	88	65.0 (25)	34.4 (66)
	Delaware	79	47.9 (71)	38.7 (47)	Page	111	73.0 (15)	44.5 (28)
	Dickinson	86	58.6 (37)	35.4 (61)	Poweshiek	121	71.1 (18)	49.9 (15)
	Emmet	46	46.4 (77)	30.7 (83)	Sac	74	71.9 (16)	40.8 (36)
	Floyd	95	62.8 (30)	39.7 (42)	Shelby	66	56.1 (44)	35.2 (62)
	Franklin	53	54.6 (48)	32.9 (73)	Tama	88	54.4 (49)	35.7 (59)
	Greene	59	63.9 (28)	32.7 (76)	Union	67	60.8 (35)	41.0 (35)
	Hamilton	66	44.9 (82)	29.2 (86)	Winnebago	38	36.3 (93)	23.8 (97)
	Hancock	44	40.8 (89)	26.6 (92)	Wright	86	67.2 (20)	37.4 (52)
					Total	2,858	58.3	37.1
Counties with Average Population > 20,000	Boone	125	53.2 (53)	39.7 (42)	Lee	191	56.1 (44)	42.8 (30)
	Buchanan	102	53.9 (51)	45.8 (23)	Mahaska	87	43.5 (85)	32.8 (74)
	Buena Vista	102	55.7 (46)	37.5 (51)	Marion	154	53.4 (52)	42.0 (32)
	Carroll	129	67.0 (21)	42.1 (31)	Marshall	316	89.4 (06)	67.1 (01)
	Cerro Gordo	243	58.5 (38)	41.5 (33)	Muscatine	197	52.4 (58)	49.7 (17)
	Clinton	212	46.9 (75)	36.0 (57)	Plymouth	95	42.6 (86)	33.2 (72)
	Des Moines	170	44.9 (82)	33.9 (68)	Sioux	81	28.4 (96)	23.1 (98)
	Fayette	123	62.5 (31)	40.2 (39)	Wapello	206	63.7 (29)	45.1 (27)
	Henry	88	48.4 (67)	37.9 (49)	Webster	285	79.7 (10)	56.4 (07)
	Jackson	129	70.8 (19)	50.6 (12)	Winneshiek	79	41.3 (88)	31.0 (81)
	Jasper	164	49.2 (65)	38.4 (48)	Total	3,278	55.8	42.0
MSA Counties	Benton	105	45.8 (79)	36.8 (55)	Linn	864	50.2 (61)	50.4 (13)
	Black Hawk	606	53.0 (56)	46.3 (21)	Madison	63	49.7 (62)	39.8 (41)
	Bremer	73	34.7 (94)	25.0 (95)	Mills	80	61.3 (33)	60.1 (03)
	Dallas	148	39.5 (90)	43.4 (29)	Polk	1,398	41.4 (87)	45.8 (23)
	Dubuque	382	47.4 (73)	39.0 (45)	Pottawattamie	513	65.3 (24)	60.8 (02)
	Grundy	59	53.2 (53)	31.9 (78)	Scott	736	51.6 (59)	53.9 (09)
	Guthrie	59	57.7 (40)	36.2 (56)	Story	178	25.0 (98)	29.2 (86)
	Harrison	91	64.8 (26)	45.2 (26)	Warren	172	46.9 (75)	49.4 (18)
	Johnson	246	24.6 (99)	39.5 (44)	Washington	162	86.4 (07)	54.1 (08)
	Jones	94	51.3 (60)	40.8 (36)	Woodbury	525	56.3 (43)	52.9 (10)
					Total	6,554	46.6	46.6
	State Total	13,583	51.7	42.5				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Chronic Obstructive Pulmonary Disease Mortality by County Group 1978-2004



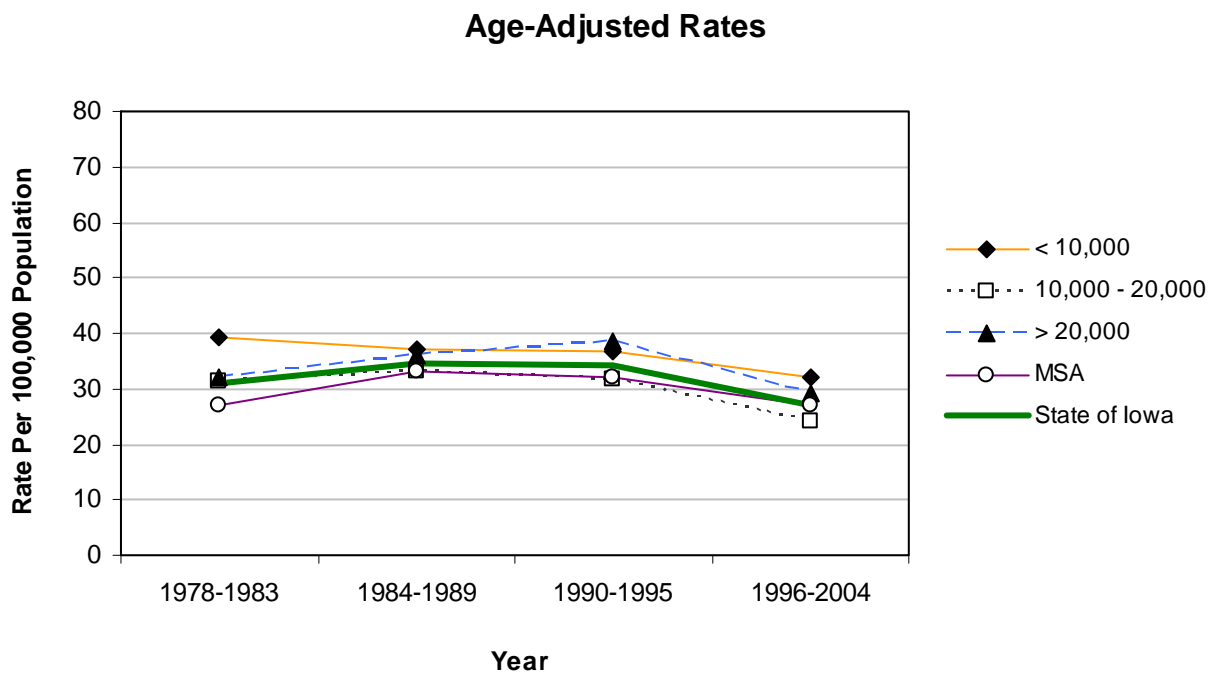
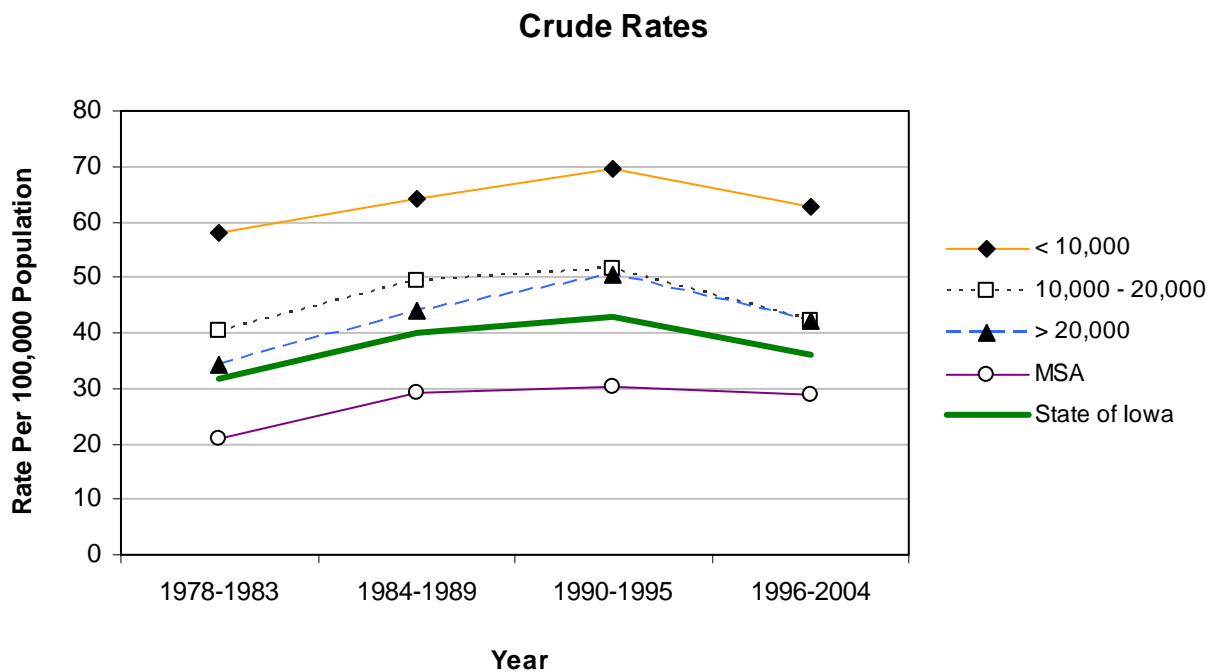
Pneumonia/Influenza Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	148	201.5 (01)	84.2 (01)	Monona	79	88.4 (02)	38.0 (12)
	Adams	11	27.5 (82)	14.0 (96)	Monroe	43	59.9 (10)	34.5 (19)
	Audubon	29	47.8 (34)	20.9 (75)	Osceola	26	41.4 (52)	24.8 (54)
	Clarke	38	46.8 (39)	26.1 (43)	Palo Alto	43	47.5 (35)	25.3 (49)
	Davis	45	58.4 (14)	36.0 (14)	Pocahontas	42	54.3 (21)	27.1 (40)
	Decatur	62	80.2 (04)	49.1 (02)	Ringgold	16	32.9 (72)	16.5 (88)
	Fremont	59	82.6 (03)	46.2 (03)	Taylor	35	56.3 (17)	25.3 (49)
	Howard	43	48.2 (33)	25.4 (46)	Van Buren	39	55.9 (19)	30.3 (31)
	Ida	37	52.9 (24)	27.5 (38)	Wayne	31	51.1 (27)	22.7 (67)
	Lucas	44	51.7 (26)	25.7 (45)	Worth	26	36.7 (65)	19.2 (79)
					Total	896	62.7	31.9
Counties with Average Population 10,000 – 20,000	Allamakee	35	26.7 (83)	15.8 (91)	Hardin	65	38.7 (61)	19.2 (79)
	Appanoose	66	53.7 (23)	31.5 (26)	Humboldt	39	42.0 (50)	22.7 (67)
	Butler	56	40.8 (54)	22.5 (69)	Iowa	79	56.0 (18)	31.4 (27)
	Calhoun	54	54.3 (21)	24.0 (60)	Jefferson	56	38.3 (62)	29.8 (33)
	Cass	66	50.2 (29)	26.3 (42)	Keokuk	46	44.9 (43)	24.1 (59)
	Cedar	39	23.9 (90)	15.3 (95)	Kossuth	61	39.8 (57)	22.9 (64)
	Cherokee	53	45.4 (42)	26.1 (43)	Louisa	49	44.8 (44)	34.7 (18)
	Chickasaw	26	22.2 (94)	13.9 (97)	Lyon	31	29.3 (79)	16.3 (89)
	Clay	48	30.8 (76)	19.2 (79)	Mitchell	34	34.7 (69)	16.6 (87)
	Clayton	93	55.4 (20)	33.0 (21)	Montgomery	52	49.6 (30)	25.4 (46)
	Crawford	33	21.7 (95)	13.7 (98)	O'Brien	77	56.9 (16)	27.4 (39)
	Delaware	44	26.7 (83)	21.0 (74)	Page	111	73.0 (05)	41.9 (07)
	Dickinson	56	38.1 (63)	21.8 (73)	Poweshiek	67	39.4 (58)	22.8 (66)
	Emmet	35	35.3 (67)	17.8 (84)	Sac	69	67.0 (07)	32.2 (23)
	Floyd	55	36.4 (66)	21.9 (72)	Shelby	68	57.8 (15)	29.9 (32)
	Franklin	37	38.1 (63)	23.4 (62)	Tama	72	44.5 (45)	24.2 (58)
	Greene	30	32.5 (73)	16.3 (89)	Union	31	28.1 (81)	17.1 (85)
	Hamilton	57	38.8 (60)	24.7 (55)	Winnebago	42	40.1 (55)	20.7 (76)
	Hancock	50	46.3 (40)	27.7 (36)	Wright	82	64.0 (08)	32.2 (23)
					Total	2,064	42.1	24.0
Counties with Average Population > 20,000	Boone	111	47.2 (37)	30.4 (30)	Lee	177	52.0 (25)	35.5 (16)
	Buchanan	47	24.8 (86)	20.1 (78)	Mahaska	62	31.0 (74)	20.7 (76)
	Buena Vista	64	35.0 (68)	22.9 (64)	Marion	146	50.6 (28)	34.9 (17)
	Carroll	93	48.3 (31)	27.6 (37)	Marshall	157	44.4 (46)	31.7 (25)
	Cerro Gordo	166	40.0 (56)	27.1 (40)	Muscatine	162	43.1 (48)	38.3 (10)
	Clinton	111	24.6 (87)	18.3 (82)	Plymouth	48	21.5 (96)	15.5 (94)
	Des Moines	156	41.2 (53)	28.7 (34)	Sioux	98	34.3 (70)	25.2 (52)
	Fayette	117	59.5 (13)	33.7 (20)	Wapello	193	59.6 (12)	38.7 (09)
	Henry	80	44.0 (47)	30.8 (28)	Webster	240	67.1 (06)	43.0 (05)
	Jackson	84	46.1 (41)	30.5 (29)	Winneshiek	63	33.0 (71)	22.4 (70)
	Jasper	98	29.4 (78)	22.1 (71)	Total	2,473	42.1	29.2
MSA Counties	Benton	51	22.3 (93)	16.7 (86)	Linn	413	24.0 (89)	23.0 (63)
	Black Hawk	214	18.7 (97)	15.7 (92)	Madison	76	59.9 (10)	39.9 (08)
	Bremer	39	18.6 (98)	12.0 (99)	Mills	63	48.3 (31)	45.5 (04)
	Dallas	156	41.7 (51)	42.7 (06)	Polk	1,047	31.0 (74)	32.9 (22)
	Dubuque	382	47.4 (36)	36.3 (13)	Pottawattamie	236	30.0 (77)	28.5 (35)
	Grundy	52	46.9 (38)	24.7 (55)	Scott	335	23.5 (91)	24.3 (57)
	Guthrie	44	43.0 (49)	24.9 (53)	Story	173	24.3 (88)	25.3 (49)
	Harrison	33	23.5 (91)	15.6 (93)	Warren	143	39.0 (59)	38.3 (10)
	Johnson	154	15.4 (99)	23.6 (61)	Washington	118	63.0 (09)	35.9 (15)
	Jones	46	25.1 (85)	18.3 (82)	Woodbury	268	28.7 (80)	25.4 (46)
					Total	4,043	28.7	27.2
	State Total	9,476	36.1	27.2				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Pneumonia/Influenza Mortality by County Group 1978-2004



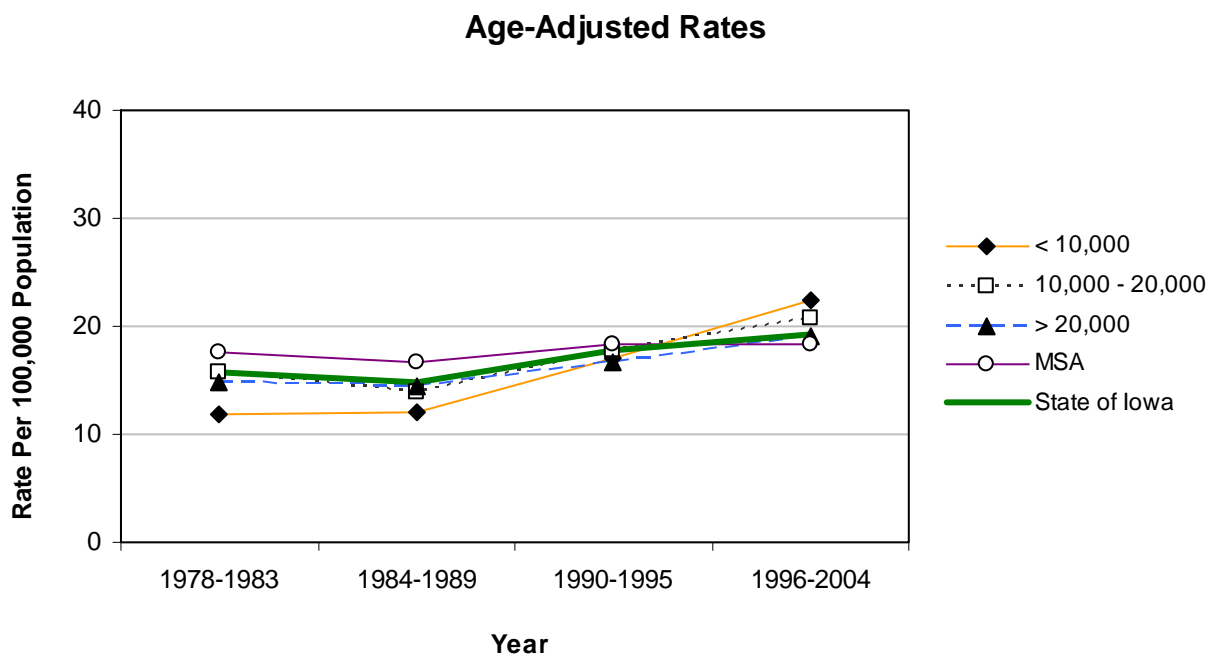
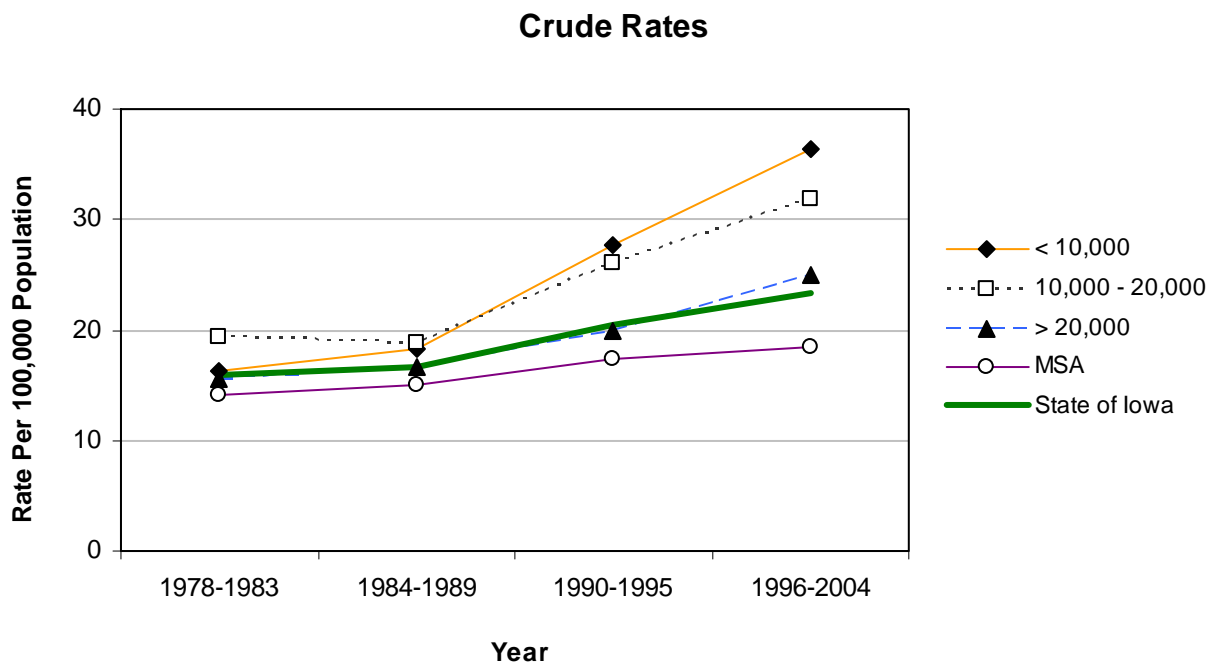
Diabetes Mellitus Mortality 1996-2004

	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)	County	#	Crude ¹ (Rank ³)	Adjusted ^{1,2} (Rank ³)
Counties with Average Population < 10,000	Adair	21	28.6 (50)	16.1 (76)	Monona	50	55.9 (03)	31.6 (04)
	Adams	10	25.0 (63)	18.7 (57)	Monroe	13	18.1 (88)	12.9 (91)
	Audubon	22	36.3 (22)	21.2 (40)	Osceola	20	31.8 (34)	21.1 (43)
	Clarke	21	25.9 (61)	17.9 (62)	Palo Alto	41	45.3 (10)	29.9 (08)
	Davis	33	42.9 (13)	30.3 (06)	Pocahontas	23	29.7 (47)	18.1 (61)
	Decatur	16	20.7 (76)	14.1 (90)	Ringgold	31	63.7 (01)	33.9 (02)
	Fremont	25	35.0 (26)	22.4 (35)	Taylor	28	45.1 (11)	27.0 (11)
	Howard	26	29.2 (49)	17.4 (66)	Van Buren	29	41.5 (14)	25.3 (17)
	Ida	32	45.7 (09)	25.1 (19)	Wayne	33	54.4 (04)	29.9 (08)
	Lucas	25	29.4 (48)	18.2 (59)	Worth	20	28.3 (52)	18.2 (59)
					Total	519	36.3	22.4
Counties with Average Population 10,000 – 20,000	Allamakee	40	30.5 (40)	20.0 (49)	Hardin	63	37.5 (19)	21.3 (39)
	Appanoose	23	18.7 (86)	11.9 (96)	Humboldt	20	21.6 (72)	14.3 (87)
	Butler	36	26.2 (58)	15.2 (80)	Iowa	42	29.8 (46)	21.2 (40)
	Calhoun	47	47.3 (06)	25.2 (18)	Jefferson	46	31.5 (37)	26.1 (15)
	Cass	62	47.1 (07)	27.0 (11)	Keokuk	39	38.1 (17)	24.7 (22)
	Cedar	49	30.0 (43)	22.7 (32)	Kossuth	37	24.2 (65)	14.9 (84)
	Cherokee	36	30.8 (39)	19.5 (52)	Louisa	22	20.1 (80)	17.2 (69)
	Chickasaw	24	20.5 (77)	14.2 (88)	Lyon	32	30.2 (42)	19.6 (51)
	Clay	54	34.6 (28)	25.0 (20)	Mitchell	25	25.5 (62)	14.2 (88)
	Clayton	53	31.6 (35)	22.7 (32)	Montgomery	53	50.6 (05)	30.5 (05)
	Crawford	55	36.2 (24)	24.5 (24)	O'Brien	36	26.6 (57)	15.0 (82)
	Delaware	38	23.0 (70)	18.6 (58)	Page	67	44.1 (12)	26.3 (13)
	Dickinson	49	33.4 (29)	20.8 (44)	Poweshiek	46	27.0 (55)	21.2 (40)
	Emmet	59	59.5 (02)	35.0 (01)	Sac	40	38.8 (16)	23.2 (29)
	Floyd	27	17.8 (89)	12.6 (93)	Shelby	32	27.2 (54)	17.3 (67)
	Franklin	19	19.6 (82)	12.9 (91)	Tama	54	33.4 (29)	22.2 (37)
	Greene	13	14.1 (97)	10.0 (98)	Union	36	32.7 (31)	23.0 (31)
	Hamilton	68	46.2 (08)	30.1 (07)	Winnebago	38	36.3 (22)	23.2 (29)
	Hancock	34	31.5 (37)	20.4 (46)	Wright	46	35.9 (25)	21.8 (38)
					Total	1,560	31.8	20.7
Counties with Average Population > 20,000	Boone	76	32.3 (33)	24.1 (27)	Lee	82	24.1 (66)	17.8 (63)
	Buchanan	74	39.1 (15)	32.5 (03)	Mahaska	41	20.5 (77)	16.3 (75)
	Buena Vista	64	35.0 (26)	24.6 (23)	Marion	75	26.0 (59)	20.2 (48)
	Carroll	43	22.3 (71)	15.0 (82)	Marshall	115	32.5 (32)	25.0 (20)
	Cerro Gordo	98	23.6 (68)	17.7 (65)	Muscatine	69	18.4 (87)	17.3 (67)
	Clinton	94	20.8 (74)	16.4 (74)	Plymouth	83	37.2 (21)	28.7 (10)
	Des Moines	61	16.1 (91)	12.0 (95)	Sioux	57	20.0 (81)	16.7 (73)
	Fayette	59	30.0 (43)	20.3 (47)	Wapello	121	37.4 (20)	26.2 (14)
	Henry	49	26.9 (56)	22.3 (36)	Webster	55	15.4 (94)	11.5 (97)
	Jackson	37	20.3 (79)	14.8 (85)	Winneshiek	45	23.6 (68)	17.8 (63)
	Jasper	64	19.2 (83)	14.8 (85)	Total	1,462	24.9	19.0
MSA Counties	Benton	55	24.0 (67)	19.5 (52)	Linn	357	20.8 (74)	20.7 (45)
	Black Hawk	244	21.3 (73)	18.8 (56)	Madison	36	28.4 (51)	22.7 (32)
	Bremer	33	15.7 (93)	12.3 (94)	Mills	20	15.3 (95)	15.2 (80)
	Dallas	59	15.8 (92)	16.8 (71)	Polk	500	14.8 (96)	16.0 (77)
	Dubuque	151	18.8 (84)	16.0 (77)	Pottawattamie	204	26.0 (59)	24.3 (25)
	Grundy	31	27.9 (53)	16.8 (71)	Scott	232	16.3 (90)	16.9 (70)
	Guthrie	31	30.3 (41)	18.9 (55)	Story	61	8.6 (99)	9.6 (99)
	Harrison	53	37.7 (18)	25.8 (16)	Warren	69	18.8 (84)	19.3 (54)
	Johnson	101	10.1 (98)	15.7 (79)	Washington	56	29.9 (45)	19.7 (50)
	Jones	58	31.6 (35)	24.3 (25)	Woodbury	231	24.8 (64)	23.3 (28)
					Total	2,582	18.4	18.3
	State Total	6,123	23.3	19.3				

¹Rates per 100,000 population²Adjusted to year 2000 population³Rank among 99 counties

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Diabetes Mellitus Mortality by County Group 1978-2004



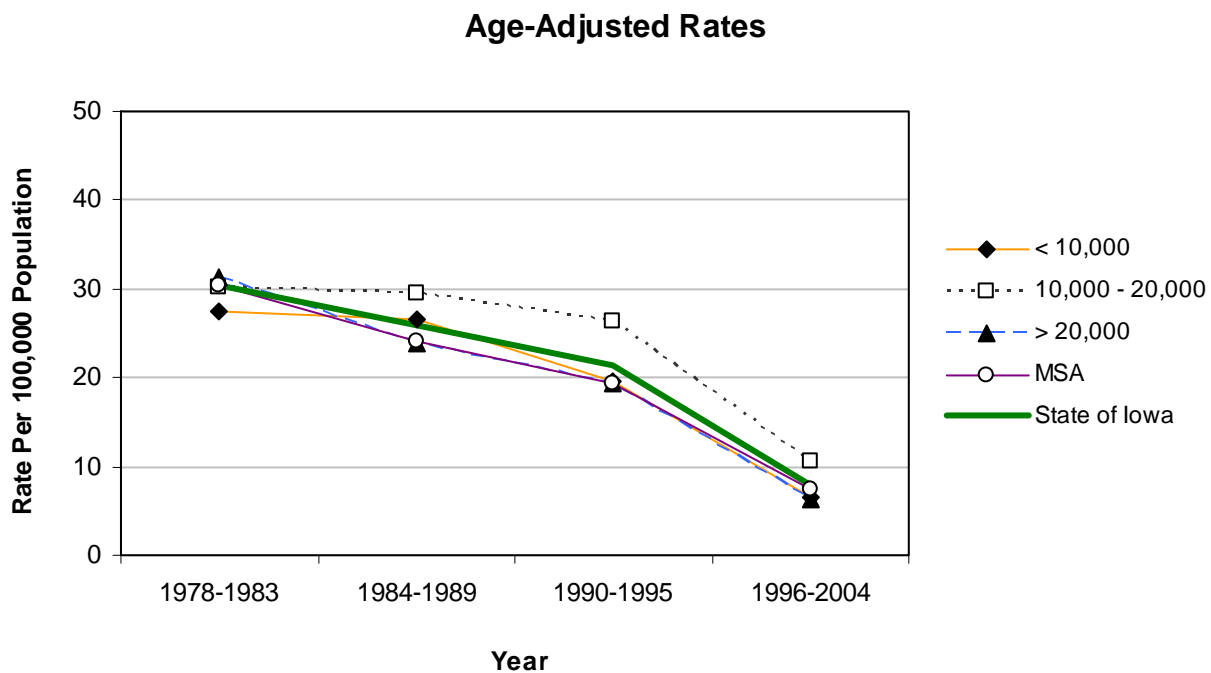
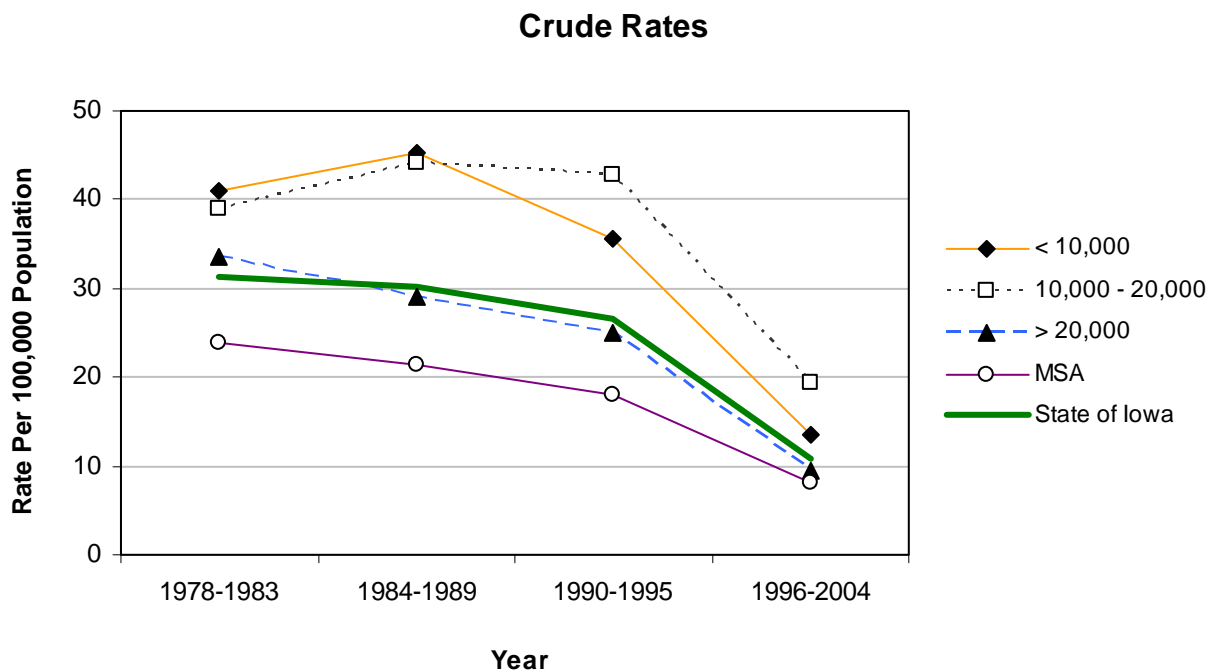
Atherosclerosis Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	43	58.5	22.9	Monona	11	12.3	4.7
	Adams	*	*	*	Monroe	22	30.6	17.0
	Audubon	15	24.7	10.4	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	5	5.5	2.5
	Davis	5	6.5	3.6	Pocahontas	19	24.6	12.5
	Decatur	8	10.4	6.1	Ringgold	*	*	*
	Fremont	5	7.0	4.5	Taylor	*	*	*
	Howard	*	*	*	Van Buren	16	22.9	11.4
	Ida	5	7.1	3.4	Wayne	17	28.0	11.4
	Lucas	6	7.1	3.8	Worth	*	*	*
					Total	194	13.6	6.6
Counties with Average Population 10,000 – 20,000	Allamakee	39	29.8	17.9	Hardin	16	9.5	5.3
	Appanoose	12	9.8	4.9	Humboldt	7	7.5	4.1
	Butler	45	32.8	17.3	Iowa	10	7.1	3.8
	Calhoun	21	21.1	9.1	Jefferson	10	6.8	5.2
	Cass	23	17.5	8.2	Keokuk	7	6.8	4.0
	Cedar	11	6.7	4.4	Kossuth	136	88.8	47.5
	Cherokee	54	46.3	25.3	Louisa	5	4.6	3.8
	Chickasaw	12	10.2	6.1	Lyon	*	*	*
	Clay	15	9.6	5.7	Mitchell	8	8.2	3.9
	Clayton	12	7.1	4.3	Montgomery	16	15.3	7.2
	Crawford	7	4.6	2.8	O'Brien	8	5.9	3.0
	Delaware	12	7.3	5.4	Page	6	3.9	2.1
	Dickinson	7	4.8	2.8	Poweshiek	9	5.3	3.0
	Emmet	*	*	*	Sac	85	82.5	36.2
	Floyd	152	100.5	52.2	Shelby	9	7.6	3.8
	Franklin	123	126.8	69.3	Tama	9	5.6	2.9
	Greene	18	19.5	9.1	Union	10	9.1	5.1
	Hamilton	6	4.1	2.4	Winnebago	10	9.6	5.0
	Hancock	*	*	*	Wright	9	7.0	3.2
					Total	946	19.3	10.6
Counties with Average Population > 20,000	Boone	31	13.2	8.3	Lee	28	8.2	5.5
	Buchanan	10	5.3	4.0	Mahaska	77	38.5	25.9
	Buena Vista	19	10.4	6.4	Marion	26	9.0	5.7
	Carroll	23	12.0	6.6	Marshall	27	7.6	5.3
	Cerro Gordo	27	6.5	4.2	Muscatine	17	4.5	4.0
	Clinton	40	8.9	6.5	Plymouth	28	12.6	8.6
	Des Moines	17	4.5	2.9	Sioux	9	3.2	2.2
	Fayette	10	5.1	2.8	Wapello	16	4.9	3.2
	Henry	14	7.7	5.2	Webster	14	3.9	2.5
	Jackson	46	25.3	16.5	Winneshiek	16	8.4	5.8
	Jasper	56	16.8	12.2	Total	551	9.4	6.3
MSA Counties	Benton	*	*	*	Linn	130	7.6	7.1
	Black Hawk	48	4.2	3.4	Madison	*	*	*
	Bremer	24	11.4	7.2	Mills	6	4.6	4.2
	Dallas	19	5.1	5.2	Polk	153	4.5	4.8
	Dubuque	120	14.9	11.7	Pottawattamie	30	3.8	3.6
	Grundy	5	4.5	2.2	Scott	168	11.8	12.2
	Guthrie	233	227.8	123.1	Story	24	3.4	3.8
	Harrison	*	*	*	Warren	21	5.7	5.5
	Johnson	43	4.3	6.7	Washington	35	18.7	9.7
	Jones	6	3.3	2.5	Woodbury	46	4.9	4.3
					Total	1,122	8.0	7.5
	State Total	2,813	10.7	7.9				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Atherosclerosis Mortality by County Group 1978-2004



Infectious/Parasitic Mortality 1996-2004

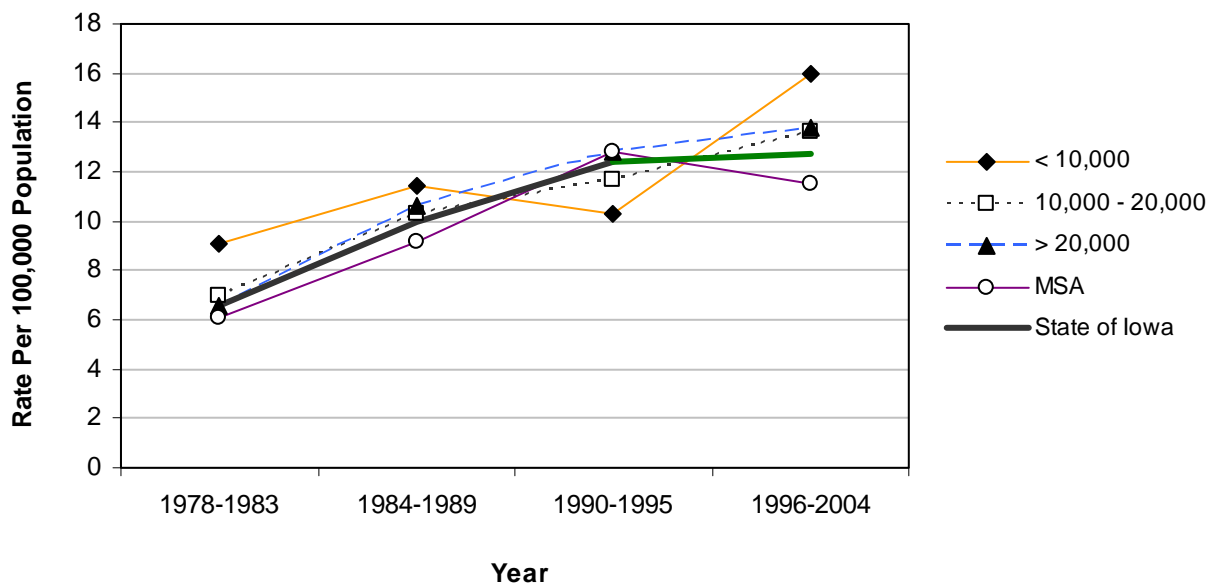
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	11	15.0	8.4	Monona	18	20.1	11.9
	Adams	*	*	*	Monroe	12	16.7	11.6
	Audubon	10	16.5	8.8	Osceola	6	9.6	6.2
	Clarke	13	16.0	9.7	Palo Alto	15	16.6	9.4
	Davis	6	7.8	7.2	Pocahontas	15	19.4	11.0
	Decatur	8	10.4	7.9	Ringgold	7	14.4	7.3
	Fremont	12	16.8	11.3	Taylor	22	35.4	20.2
	Howard	8	9.0	6.6	Van Buren	21	30.1	20.2
	Ida	6	8.6	5.0	Wayne	9	14.8	9.0
	Lucas	16	18.8	13.5	Worth	11	15.5	10.2
					Total	226-230	15.8-16.0	10.0-10.2
Counties with Average Population 10,000 – 20,000	Allamakee	12	9.2	6.0	Hardin	26	15.5	8.7
	Appanoose	16	13.0	9.8	Humboldt	5	5.4	3.0
	Butler	14	10.2	6.0	Iowa	25	17.7	12.0
	Calhoun	18	18.1	10.4	Jefferson	18	12.3	10.0
	Cass	24	18.2	12.7	Keokuk	24	23.4	15.2
	Cedar	15	9.2	7.2	Kossuth	27	17.6	11.4
	Cherokee	16	13.7	9.2	Louisa	11	10.1	8.5
	Chickasaw	7	6.0	5.6	Lyon	7	6.6	4.9
	Clay	19	12.2	9.3	Mitchell	7	7.1	4.4
	Clayton	27	16.1	11.8	Montgomery	17	16.2	10.8
	Crawford	22	14.5	10.9	O'Brien	15	11.1	6.1
	Delaware	18	10.9	8.9	Page	38	25.0	17.7
	Dickinson	14	9.5	6.5	Poweshiek	14	8.2	6.5
	Emmet	15	15.1	10.3	Sac	14	13.6	8.3
	Floyd	19	12.6	8.8	Shelby	23	19.5	12.7
	Franklin	5	5.2	3.9	Tama	28	17.3	12.6
	Greene	21	22.7	13.5	Union	15	13.6	10.2
	Hamilton	30	20.4	15.3	Winnebago	15	14.3	8.4
	Hancock	12	11.1	8.1	Wright	13	10.2	5.8
					Total	666	13.6	9.4
Counties with Average Population > 20,000	Boone	37	15.7	12.7	Lee	63	18.5	14.4
	Buchanan	26	13.7	11.9	Mahaska	17	8.5	6.4
	Buena Vista	18	9.8	8.6	Marion	35	12.1	9.2
	Carroll	15	7.8	5.0	Marshall	51	14.4	11.9
	Cerro Gordo	59	14.2	11.0	Muscatine	55	14.6	13.7
	Clinton	62	13.7	11.2	Plymouth	34	15.3	12.0
	Des Moines	88	23.3	18.4	Sioux	36	12.6	10.3
	Fayette	24	12.2	8.5	Wapello	44	13.6	9.8
	Henry	27	14.8	13.0	Webster	54	15.1	11.6
	Jackson	26	14.3	11.1	Winneshiek	12	6.3	4.9
	Jasper	27	8.1	6.9	Total	810	13.8	11.0
MSA Counties	Benton	29	12.7	10.5	Linn	215	12.5	12.4
	Black Hawk	154	13.5	12.5	Madison	20	15.8	12.5
	Bremer	26	12.4	10.1	Mills	27	20.7	20.0
	Dallas	41	11.0	11.3	Polk	414	12.3	13.0
	Dubuque	68	8.4	7.2	Pottawattamie	84	10.7	10.2
	Grundy	17	15.3	10.6	Scott	182	12.8	13.1
	Guthrie	12	11.7	7.6	Story	53	7.4	8.5
	Harrison	14	10.0	7.8	Warren	28	7.6	7.6
	Johnson	63	6.3	8.8	Washington	30	16.0	12.1
	Jones	20	10.9	8.8	Woodbury	123	13.2	12.7
					Total	1,620	11.5	11.5
	State Total	3,322-6	12.6-12.7	10.8-10.9				

¹Rates per 100,000 population²Adjusted to year 2000 population

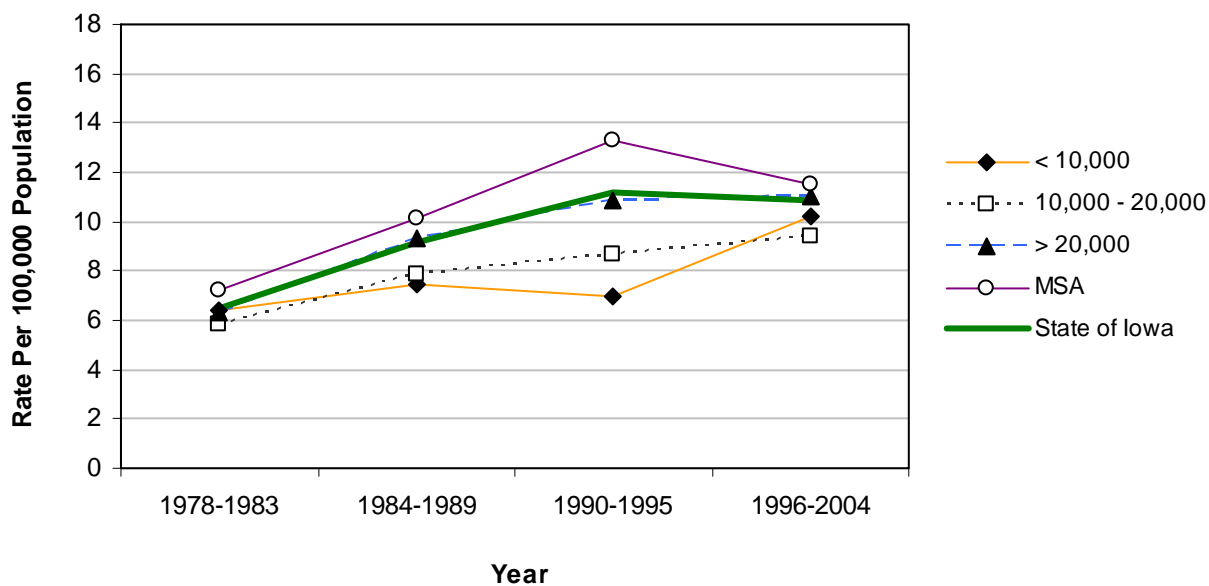
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Infectious/Parasitic Mortality by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



Nephritis, Nephrotic Syndrome, Nephrosis Mortality 1996-2004

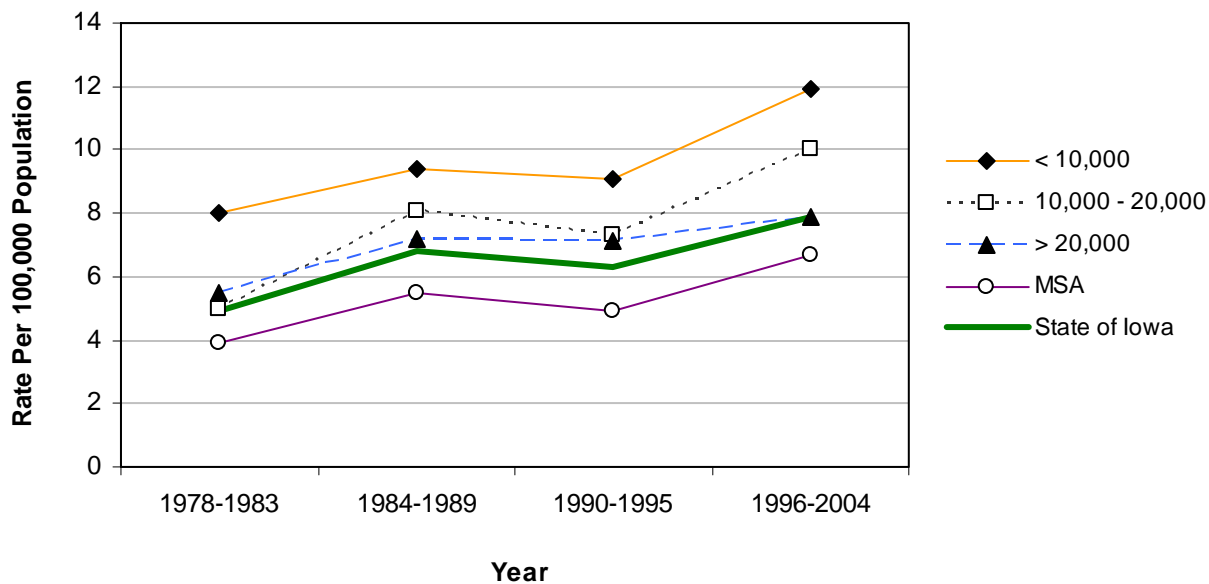
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	7	9.5	6.2	Monona	15	16.8	8.3
	Adams	7	17.5	11.8	Monroe	6	8.4	5.8
	Audubon	14	23.1	9.5	Osceola	*	*	*
	Clarke	10	12.3	7.8	Palo Alto	8	8.8	4.6
	Davis	12	15.6	9.6	Pocahontas	*	*	*
	Decatur	8	10.4	6.2	Ringgold	10	20.5	8.9
	Fremont	12	16.8	9.8	Taylor	8	12.9	7.7
	Howard	15	16.8	9.3	Van Buren	9	12.9	7.3
	Ida	9	12.9	6.6	Wayne	*	*	*
	Lucas	7	8.2	5.1	Worth	*	*	*
					Total	170	11.9	6.6
Counties with Average Population 10,000 – 20,000	Allamakee	12	9.2	5.5	Hardin	24	14.3	8.1
	Appanoose	11	8.9	6.0	Humboldt	12	12.9	7.3
	Butler	25	18.2	10.4	Iowa	11	7.8	5.1
	Calhoun	6	6.0	2.5	Jefferson	5	3.4	2.8
	Cass	15	11.4	6.3	Keokuk	16	15.6	8.8
	Cedar	12	7.4	5.0	Kossuth	15	9.8	5.5
	Cherokee	8	6.9	4.8	Louisa	6	5.5	4.6
	Chickasaw	7	6.0	3.5	Lyon	14	13.2	8.1
	Clay	20	12.8	8.5	Mitchell	6	6.1	3.2
	Clayton	13	7.7	4.7	Montgomery	22	21.0	12.0
	Crawford	16	10.5	7.2	O'Brien	12	8.9	4.7
	Delaware	8	4.9	3.7	Page	27	17.8	10.9
	Dickinson	22	15.0	9.3	Poweshiek	11	6.5	4.2
	Emmet	13	13.1	7.7	Sac	13	12.6	6.5
	Floyd	13	8.6	4.6	Shelby	12	10.2	6.3
	Franklin	*	*	*	Tama	19	11.7	7.0
	Greene	15	16.2	9.1	Union	14	12.7	7.2
	Hamilton	17	11.6	7.8	Winnebago	7	6.7	4.0
	Hancock	*	*	*	Wright	7	5.5	2.8
					Total	491	10.0	6.1
Counties with Average Population > 20,000	Boone	23	9.8	7.1	Lee	38	11.2	7.6
	Buchanan	21	11.1	8.7	Mahaska	12	6.0	3.9
	Buena Vista	14	7.6	5.2	Marion	21	7.3	5.4
	Carroll	15	7.8	5.2	Marshall	46	13.0	9.7
	Cerro Gordo	15	3.6	2.5	Muscatine	27	7.2	6.9
	Clinton	26	5.8	4.5	Plymouth	9	4.0	2.9
	Des Moines	34	9.0	6.3	Sioux	22	7.7	5.8
	Fayette	19	9.7	6.2	Wapello	30	9.3	7.1
	Henry	9	4.9	3.7	Webster	31	8.7	6.1
	Jackson	16	8.8	6.4	Winneshiek	15	7.	5.9
	Jasper	22	6.6	5.1	Total	465	7.9	5.8
MSA Counties	Benton	10	4.4	3.4	Linn	80	4.7	4.5
	Black Hawk	101	8.8	7.5	Madison	9	7.1	4.5
	Bremer	20	9.5	6.4	Mills	19	14.6	13.8
	Dallas	22	5.9	6.6	Polk	226	6.7	7.3
	Dubuque	54	6.7	5.1	Pottawattamie	70	8.9	8.4
	Grundy	18	16.2	9.8	Scott	89	6.2	6.5
	Guthrie	7	6.8	3.8	Story	36	5.0	5.4
	Harrison	15	10.7	7.1	Warren	21	5.7	5.8
	Johnson	38	3.8	5.9	Washington	10	5.3	3.8
	Jones	17	9.3	7.1	Woodbury	77	8.3	7.5
					Total	939	6.7	6.5
	State Total	2,065	7.9	6.2				

¹Rates per 100,000 population²Adjusted to year 2000 population

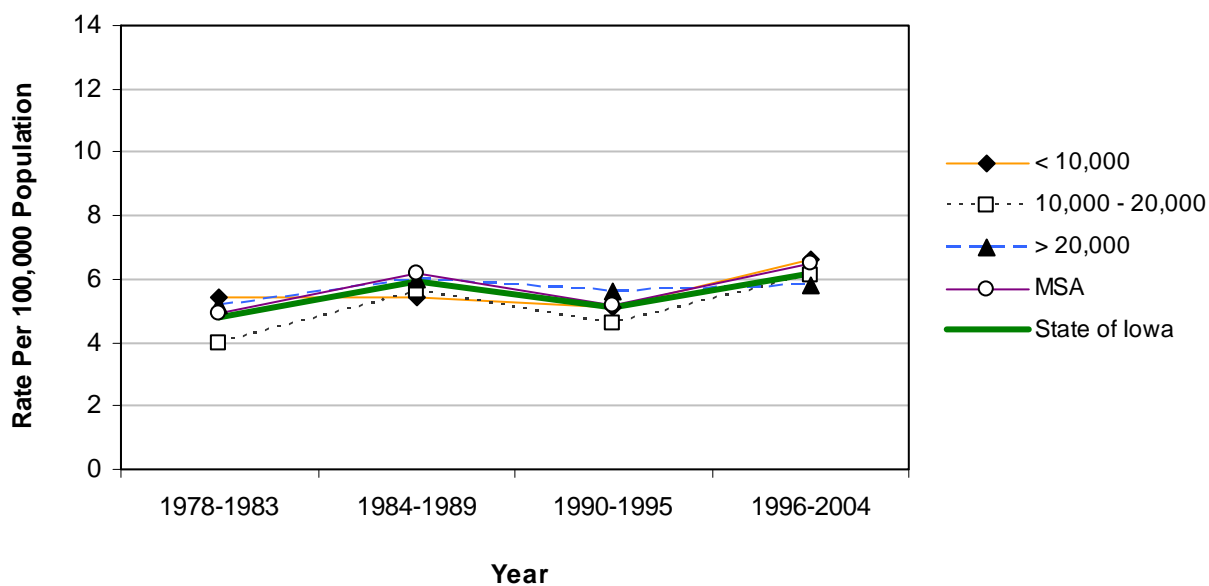
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Nephritis, Nephrotic Syndrome, Nephrosis Mortality by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



Chronic Liver Disease and Cirrhosis Mortality 1996-2004

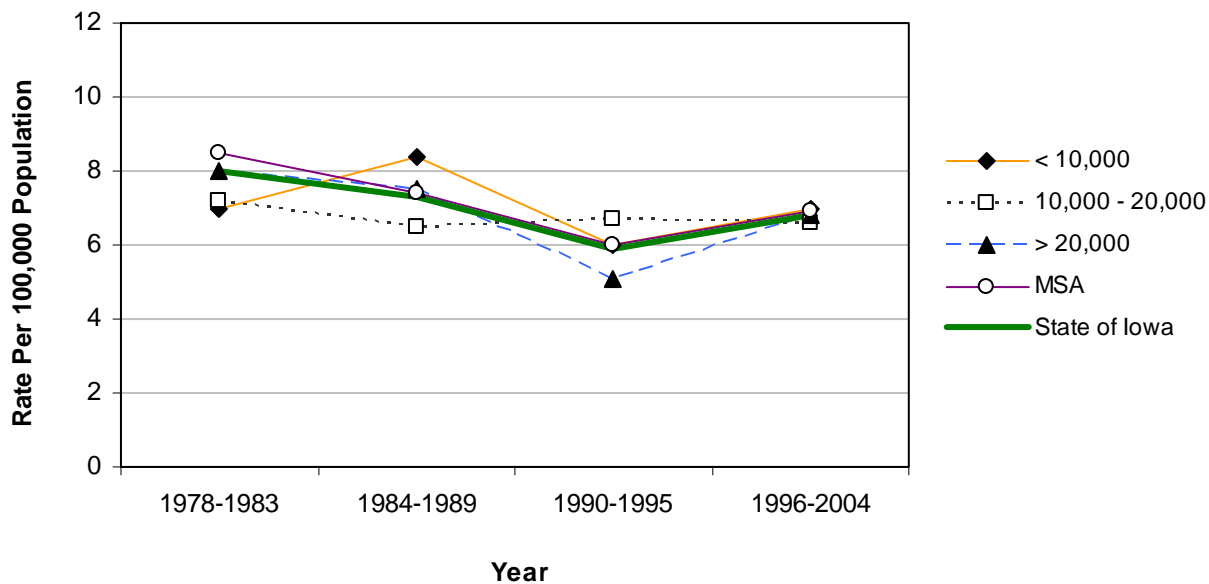
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	5	6.8	6.1	Monona	9	10.1	6.8
	Adams	7	17.5	14.6	Monroe	8	11.1	7.7
	Audubon	5	8.2	4.1	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	8	8.8	7.1
	Davis	*	*	*	Pocahontas	7	9.1	6.9
	Decatur	*	*	*	Ringgold	5	10.3	6.3
	Fremont	*	*	*	Taylor	5	8.0	4.9
	Howard	5	5.6	4.3	Van Buren	*	*	*
	Ida	7	10.0	7.7	Wayne	*	*	*
	Lucas	5	5.9	5.0	Worth	9	12.7	10.6
					Total	100	7.0	5.2
Counties with Average Population 10,000 – 20,000	Allamakee	14	10.7	8.1	Hardin	7	4.2	3.5
	Appanoose	7	5.7	5.1	Humboldt	*	*	*
	Butler	9	6.6	4.4	Iowa	7	5.0	4.2
	Calhoun	7	7.0	4.2	Jefferson	7	4.8	4.2
	Cass	8	6.1	5.1	Keokuk	5	4.9	3.8
	Cedar	13	8.0	6.7	Kossuth	13	8.5	6.1
	Cherokee	*	*	*	Louisa	8	7.3	6.7
	Chickasaw	11	9.4	8.1	Lyon	6	5.7	4.4
	Clay	7	4.5	4.2	Mitchell	*	*	*
	Clayton	14	8.3	5.8	Montgomery	7	6.7	4.8
	Crawford	10	6.6	5.6	O'Brien	11	8.1	5.9
	Delaware	13	7.9	7.3	Page	7	4.6	4.0
	Dickinson	13	8.9	6.9	Poweshiek	10	5.9	5.5
	Emmet	10	10.1	6.9	Sac	7	6.8	4.4
	Floyd	*	*	*	Shelby	6	5.1	4.0
	Franklin	6	6.2	4.3	Tama	18	11.1	10.2
	Greene	6	6.5	4.6	Union	8	7.3	5.4
	Hamilton	9	6.1	4.8	Winnebago	8	7.6	6.2
	Hancock	7	6.5	5.4	Wright	8	6.2	4.4
					Total	322	6.6	5.2
Counties with Average Population > 20,000	Boone	23	9.8	8.2	Lee	32	9.4	8.0
	Buchanan	12	6.3	6.2	Mahaska	10	5.0	4.5
	Buena Vista	11	6.0	5.4	Marion	23	8.0	7.3
	Carroll	8	4.2	2.8	Marshall	35	9.9	8.3
	Cerro Gordo	42	10.1	8.6	Muscatine	21	5.6	5.5
	Clinton	30	6.6	5.9	Plymouth	8	3.6	3.2
	Des Moines	21	5.6	4.8	Sioux	8	2.8	2.7
	Fayette	12	6.1	4.8	Wapello	23	7.1	5.6
	Henry	6	3.3	2.9	Webster	33	9.2	8.1
	Jackson	12	6.6	5.6	Winneshiek	8	4.2	3.5
	Jasper	20	6.0	4.9	Total	398	6.8	5.9
MSA Counties	Benton	17	7.4	6.7	Linn	96	5.6	5.7
	Black Hawk	73	6.4	6.1	Madison	*	*	*
	Bremer	18	8.6	6.5	Mills	9	6.9	6.7
	Dallas	17	4.5	5.0	Polk	323	9.6	10.1
	Dubuque	53	6.6	6.1	Pottawattamie	48	6.1	5.8
	Grundy	7	6.3	4.0	Scott	89	6.2	6.3
	Guthrie	12	11.7	8.3	Story	28	3.9	5.0
	Harrison	11	7.8	6.2	Warren	19	5.2	5.3
	Johnson	29	2.9	4.4	Washington	13	6.9	5.4
	Jones	11	6.0	5.3	Woodbury	87	9.3	9.5
					Total	960-4	6.7-6.9	6.8-7.0
	State Total	1,780-4	6.7-6.8	6.2-6.3				

¹Rates per 100,000 population²Adjusted to year 2000 population

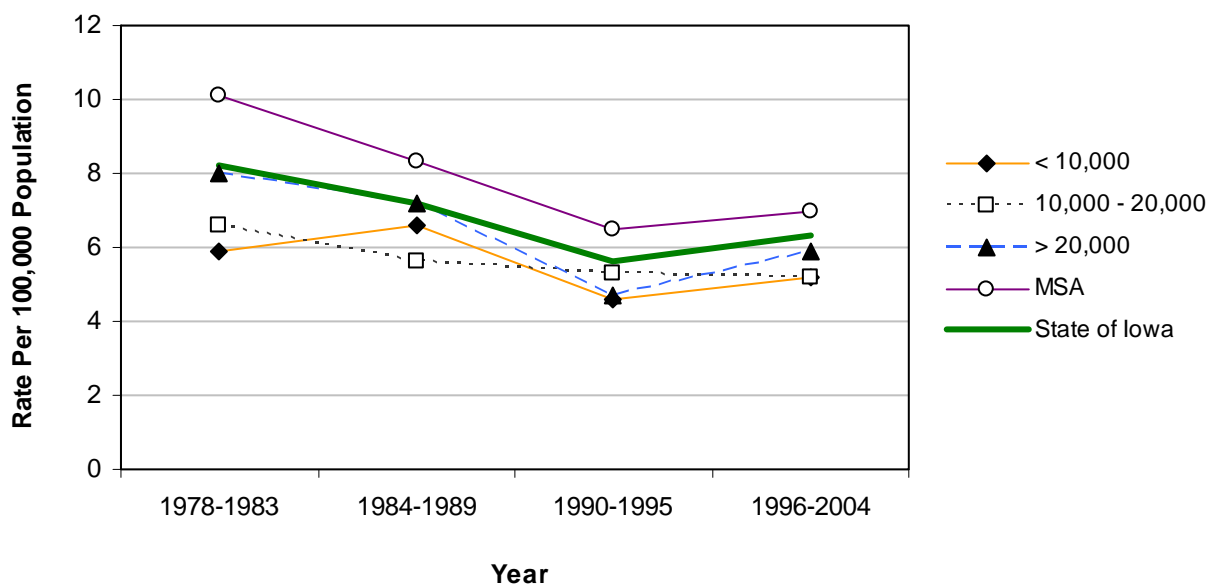
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Chronic Liver Disease and Cirrhosis Mortality by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



Congenital Anomalies Mortality 1996-2004

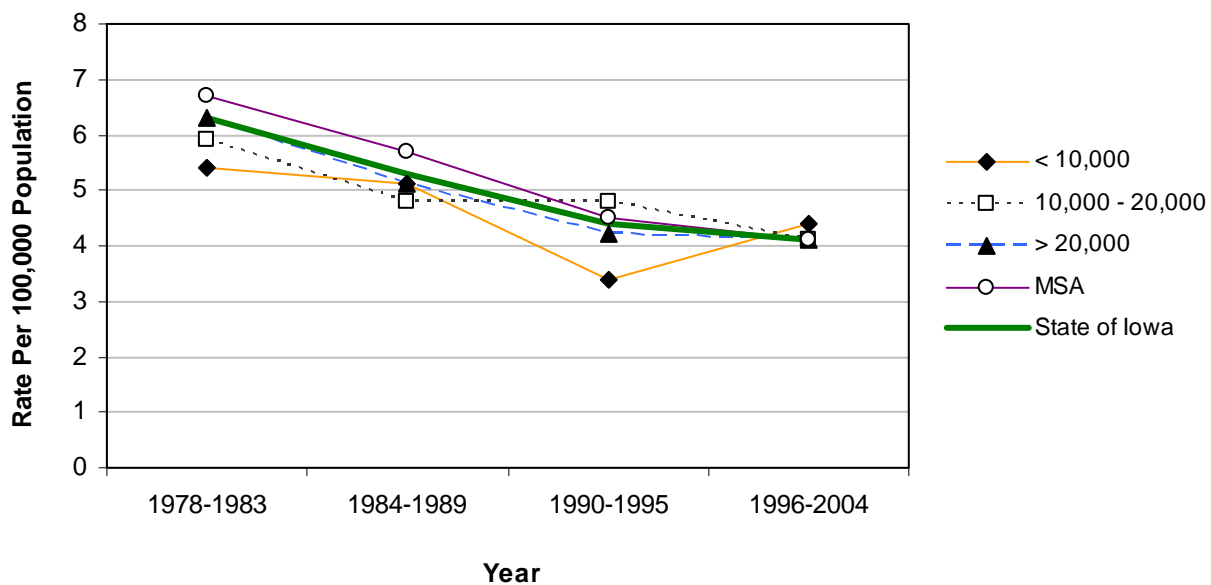
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	5	8.2	7.7	Osceola	5	8.0	7.7
	Clarke	*	*	*	Palo Alto	6	6.6	5.9
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	6	7.8	10.1	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	6	8.6	10.7	Wayne	5	8.2	10.6
	Lucas	5	5.9	6.4	Worth	*	*	*
					Total	63	4.4	4.5
Counties with Average Population 10,000 – 20,000	Allamakee	8	6.1	6.8	Hardin	9	5.4	5.7
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	6	4.4	5.4	Iowa	8	5.7	5.7
	Calhoun	*	*	*	Jefferson	6	4.1	3.7
	Cass	6	4.6	3.4	Keokuk	*	*	*
	Cedar	5	3.1	3.5	Kossuth	8	5.2	5.2
	Cherokee	7	6.0	5.2	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	6	5.7	5.3
	Clay	11	7.1	6.7	Mitchell	6	6.1	5.6
	Clayton	7	4.2	3.8	Montgomery	*	*	*
	Crawford	5	3.3	3.6	O'Brien	5	3.7	4.6
	Delaware	6	3.6	3.8	Page	6	3.9	4.6
	Dickinson	5	3.4	3.4	Poweshiek	*	*	*
	Emmet	7	7.1	8.5	Sac	*	*	*
	Floyd	8	5.3	6.1	Shelby	*	*	*
	Franklin	*	*	*	Tama	5	3.1	3.2
	Greene	*	*	*	Union	*	*	*
	Hamilton	5	3.4	3.6	Winnebago	*	*	*
	Hancock	*	*	*	Wright	11	8.6	8.3
					Total	199	4.1	4.2
Counties with Average Population > 20,000	Boone	10	4.3	4.4	Lee	11	3.2	3.3
	Buchanan	13	6.9	6.4	Mahaska	*	*	*
	Buena Vista	5	2.7	3.2	Marion	10	3.5	3.7
	Carroll	11	5.7	5.6	Marshall	14	4.0	4.1
	Cerro Gordo	30	7.2	7.5	Muscatine	14	3.7	3.7
	Clinton	23	5.1	5.3	Plymouth	12	5.4	5.0
	Des Moines	10	2.6	2.7	Sioux	9	3.2	3.4
	Fayette	6	3.1	2.6	Wapello	13	4.0	3.9
	Henry	11	6.0	7.0	Webster	11	3.1	3.2
	Jackson	10	5.5	6.	Winneshiek	6	3.1	3.9
	Jasper	8	2.4	2.3	Total	237-41	3.9-4.1	4.0-4.2
MSA Counties	Benton	6	2.6	2.6	Linn	76	4.4	4.4
	Black Hawk	41	3.6	3.9	Madison	8	6.3	6.0
	Bremer	8	3.8	3.6	Mills	10	7.7	8.2
	Dallas	14	3.7	3.8	Polk	152	4.5	4.3
	Dubuque	28	3.5	3.5	Pottawattamie	40	5.1	5.0
	Grundy	*	*	*	Scott	44	3.1	3.1
	Guthrie	*	*	*	Story	25	3.5	4.5
	Harrison	8	5.7	6.0	Warren	12	3.3	3.7
	Johnson	32	3.2	3.8	Washington	9	4.8	4.1
	Jones	*	*	*	Woodbury	57	6.1	5.8
					Total	576	4.1	4.1
	State Total	1,075-9	4.0-4.1	4.1-4.2				

¹Rates per 100,000 population²Adjusted to year 2000 population

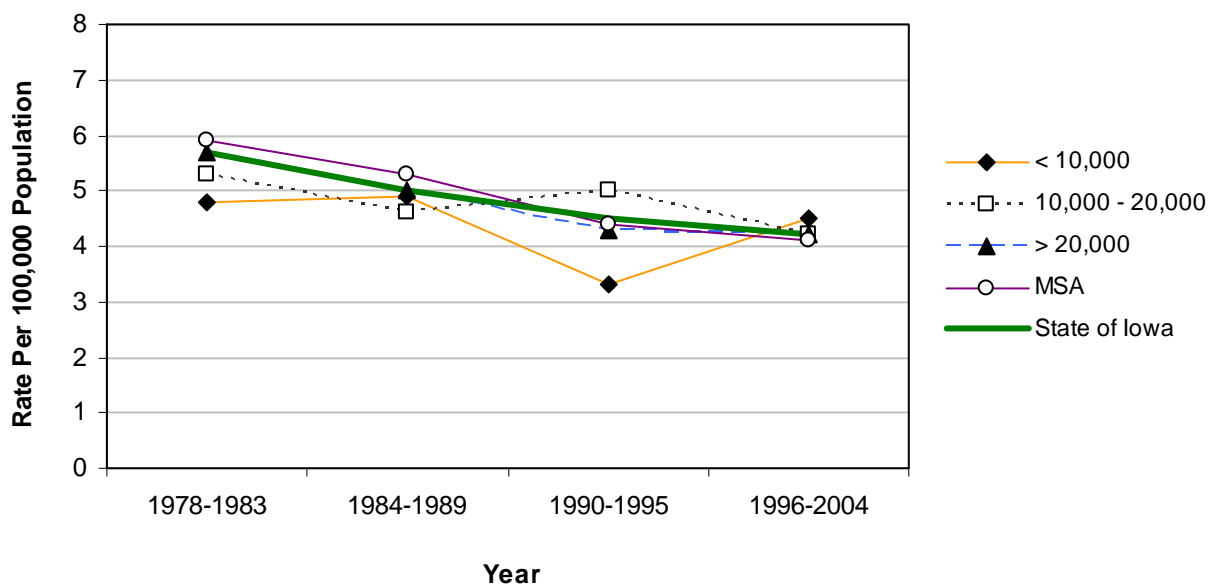
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Congenital Anomalies Mortality by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



Conditions Originating in Perinatal Period Mortality 1996-2004

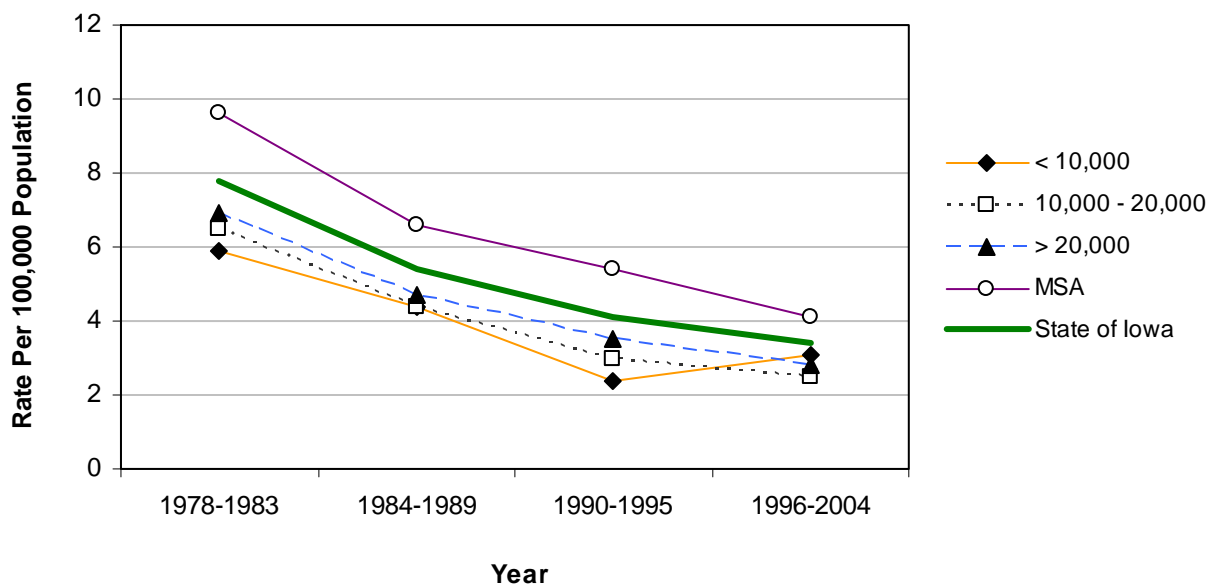
	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	*	*	*	Monona	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Palo Alto	*	*	*
	Davis	*	*	*	Pocahontas	*	*	*
	Decatur	*	*	*	Ringgold	*	*	*
	Fremont	*	*	*	Taylor	*	*	*
	Howard	*	*	*	Van Buren	*	*	*
	Ida	*	*	*	Wayne	*	*	*
	Lucas	*	*	*	Worth	6	8.5	10.6
					Total	44	3.1	4.0
Counties with Average Population 10,000 – 20,000	Allamakee	5	3.8	4.9	Hardin	5	3.0	3.7
	Appanoose	*	*	*	Humboldt	*	*	*
	Butler	*	*	*	Iowa	*	*	*
	Calhoun	*	*	*	Jefferson	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	5	3.3	4.6
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	5	4.7	4.8
	Clay	5	3.2	3.7	Mitchell	5	5.1	5.9
	Clayton	*	*	*	Montgomery	6	5.7	7.5
	Crawford	*	*	*	O'Brien	*	*	*
	Delaware	6	3.6	4.3	Page	8	5.3	7.0
	Dickinson	*	*	*	Poweshiek	*	*	*
	Emmet	*	*	*	Sac	*	*	*
	Floyd	*	*	*	Shelby	5	4.2	5.6
	Franklin	*	*	*	Tama	5	3.1	3.4
	Greene	5	5.4	7.1	Union	*	*	*
	Hamilton	5	3.4	3.9	Winnebago	*	*	*
	Hancock	*	*	*	Wright	*	*	*
					Total	125	2.5	3.2
Counties with Average Population > 20,000	Boone	7	3.0	3.5	Lee	17	5.0	6.0
	Buchanan	5	2.6	2.6	Mahaska	12	6.0	6.5
	Buena Vista	5	2.7	3.3	Marion	10	3.5	3.9
	Carroll	7	3.6	4.3	Marshall	8	2.3	2.4
	Cerro Gordo	8	1.9	2.4	Muscatine	*	*	*
	Clinton	11	2.4	2.8	Plymouth	5	2.2	2.6
	Des Moines	12	3.2	3.5	Sioux	8	2.8	2.9
	Fayette	*	*	*	Wapello	8	2.5	2.8
	Henry	*	*	*	Webster	7	2.0	2.2
	Jackson	8	4.4	5.6	Winneshiek	*	*	*
	Jasper	13	3.9	4.4	Total	163	2.8	3.2
MSA Counties	Benton	8	3.5	4.1	Linn	70	4.1	4.0
	Black Hawk	30	2.6	3.0	Madison	9	7.1	7.7
	Bremer	*	*	*	Mills	*	*	*
	Dallas	12	3.2	3.2	Polk	166	4.9	4.4
	Dubuque	22	2.7	2.9	Pottawattamie	34	4.3	4.4
	Grundy	*	*	*	Scott	71	5.0	4.9
	Guthrie	*	*	*	Story	19	2.7	3.3
	Harrison	*	*	*	Warren	19	5.2	5.9
	Johnson	35	3.5	4.0	Washington	11	5.9	5.9
	Jones	8	4.4	5.7	Woodbury	41	4.4	4.1
					Total	570	4.1	4.1
	State Total	902	3.4	3.8				

¹Rates per 100,000 population²Adjusted to year 2000 population

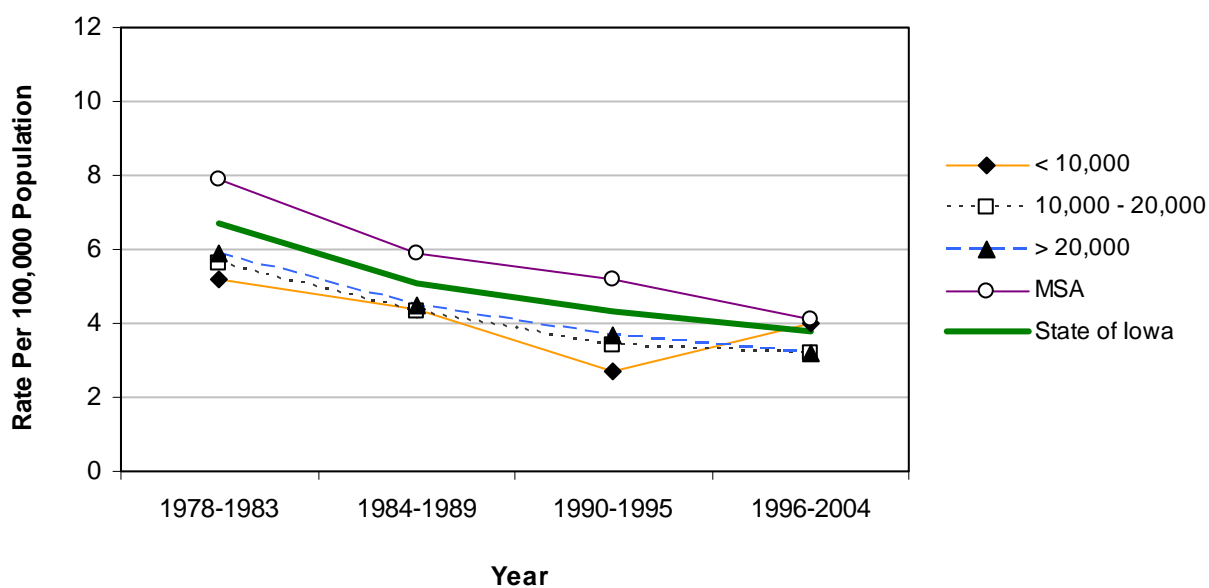
Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Conditions Originating in Perinatal Period Mortality by County Group 1978-2004

Crude Rates



Age-Adjusted Rates



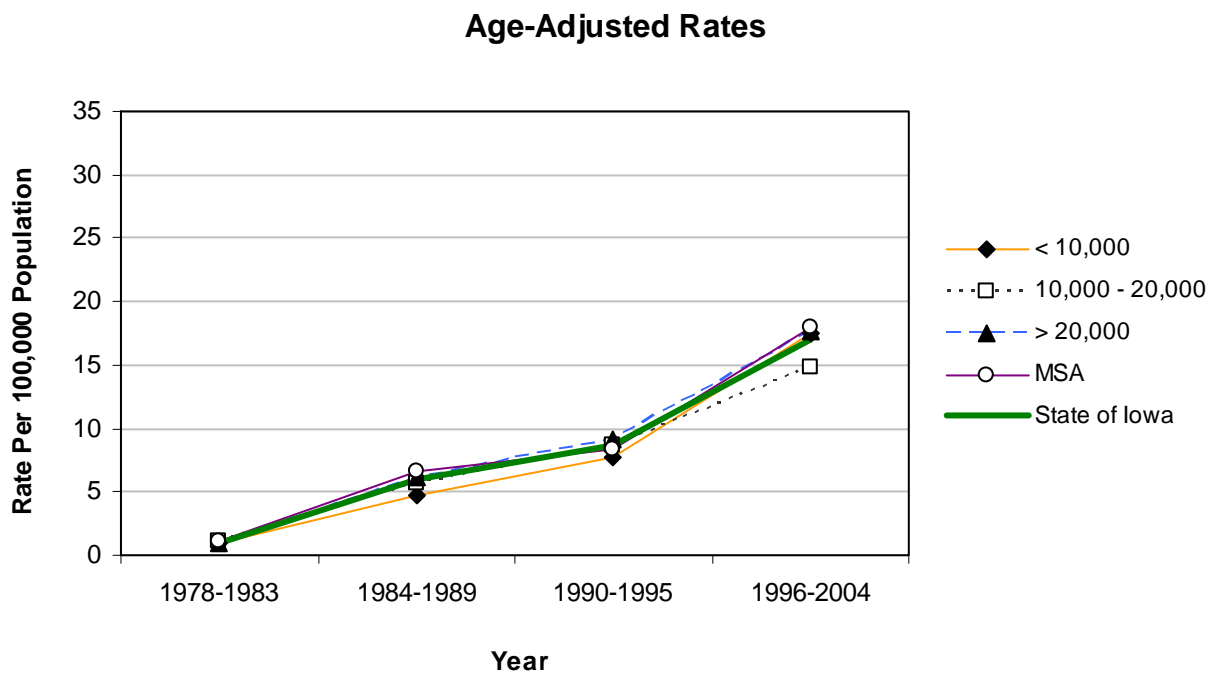
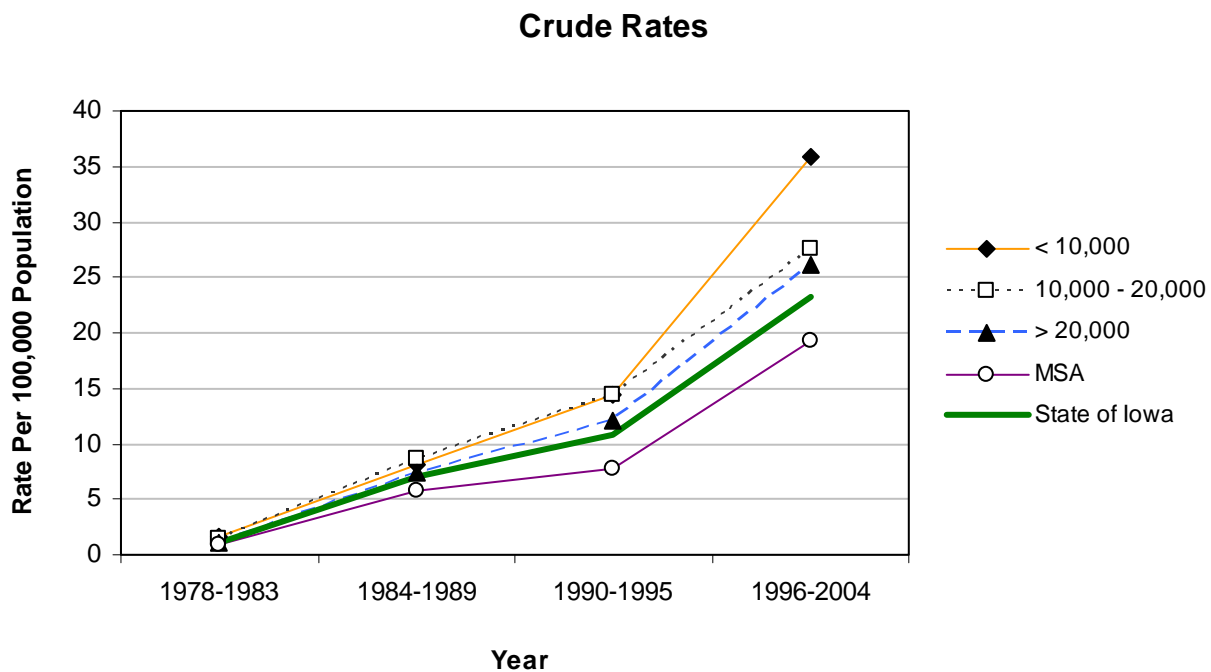
Alzheimer's Disease Mortality 1996-2004

	County	#	Crude ¹	Adjusted ^{1,2}	County	#	Crude ¹	Adjusted ^{1,2}
Counties with Average Population < 10,000	Adair	8	10.9	4.5	Monona	54	60.4	24.5
	Adams	12	30.0	14.9	Monroe	20	27.8	15.2
	Audubon	46	75.8	32.3	Osceola	7	11.1	6.3
	Clarke	38	46.8	26.9	Palo Alto	37	40.9	18.9
	Davis	*	*	*	Pocahontas	25	32.3	14.5
	Decatur	19	24.6	15.1	Ringgold	35	71.9	30.7
	Fremont	35	49.0	26.5	Taylor	25	40.2	17.2
	Howard	29	32.5	15.8	Van Buren	18	25.8	14.0
	Ida	23	32.9	16.3	Wayne	18	29.7	12.4
	Lucas	22	25.9	13.5	Worth	39	55.1	26.9
					Total	510-14	35.7-35.9	17.4-17.6
Counties with Average Population 10,000 – 20,000	Allamakee	56	42.7	24.4	Hardin	64	38.1	17.7
	Appanoose	13	10.6	5.5	Humboldt	27	29.1	14.3
	Butler	35	25.5	13.5	Iowa	29	20.6	11.9
	Calhoun	59	59.4	25.8	Jefferson	46	31.5	23.0
	Cass	29	22.0	10.6	Keokuk	15	14.6	7.1
	Cedar	12	7.4	4.1	Kossuth	51	33.3	17.2
	Cherokee	21	18.0	10.1	Louisa	13	11.9	9.3
	Chickasaw	27	23.0	14.6	Lyon	19	17.9	10.0
	Clay	38	24.4	14.4	Mitchell	7	7.1	3.4
	Clayton	57	34.0	19.4	Montgomery	30	28.6	12.6
	Crawford	47	30.9	18.4	O'Brien	35	25.8	12.1
	Delaware	36	21.8	16.1	Page	39	25.6	13.3
	Dickinson	26	17.7	9.9	Poweshiek	54	31.7	17.4
	Emmet	34	34.3	17.2	Sac	27	26.2	11.7
	Floyd	46	30.4	16.8	Shelby	39	33.1	17.2
	Franklin	31	32.0	17.1	Tama	77	47.6	25.9
	Greene	23	24.9	10.8	Union	32	29.1	16.5
	Hamilton	34	23.1	14.2	Winnebago	30	28.7	14.7
	Hancock	29	26.9	15.2	Wright	60	46.9	22.1
					Total	1,347	27.5	14.8
Counties with Average Population > 20,000	Boone	103	43.8	27.6	Lee	108	31.7	21.0
	Buchanan	34	18.0	13.9	Mahaska	39	19.5	12.8
	Buena Vista	37	20.2	12.3	Marion	64	22.2	14.5
	Carroll	62	32.2	17.7	Marshall	243	68.8	48.8
	Cerro Gordo	143	34.4	21.7	Muscatine	67	17.8	16.0
	Clinton	80	17.7	12.7	Plymouth	71	31.8	21.7
	Des Moines	70	18.5	12.3	Sioux	46	16.1	11.7
	Fayette	79	40.2	21.9	Wapello	74	22.9	14.5
	Henry	20	11.0	7.6	Webster	74	20.7	12.7
	Jackson	24	13.2	8.3	Winneshiek	26	13.6	8.8
	Jasper	76	22.8	16.6	Total	1,540	26.2	17.6
MSA Counties	Benton	40	17.5	12.1	Linn	280	16.3	15.5
	Black Hawk	222	19.4	15.5	Madison	57	44.9	30.7
	Bremer	70	33.3	20.5	Mills	25	19.2	17.8
	Dallas	66	17.6	17.7	Polk	589	17.4	18.5
	Dubuque	157	19.5	14.8	Pottawattamie	188	23.9	22.7
	Grundy	44	39.6	20.4	Scott	275	19.3	20.0
	Guthrie	24	23.5	13.1	Story	108	15.1	15.6
	Harrison	33	23.5	14.2	Warren	128	34.9	33.8
	Johnson	101	10.1	15.7	Washington	38	20.3	11.3
	Jones	27	14.7	10.5	Woodbury	234	25.1	21.5
					Total	2,706	19.2	17.9
	State Total	6,103-7	23.2-23.3	17.0-17.1				

¹Rates per 100,000 population²Adjusted to year 2000 population

Source: State Health Registry of Iowa via NCI's SEER*Stat Program

Alzheimer's Disease Mortality by County Group 1978-2004



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Health Care Providers

The Office of Statewide Clinical Education Programs (OSCEP) at the University of Iowa Carver College of Medicine, the Iowa Department of Public Health, Board of Nursing, and the Bureau of Emergency Medical Services collect the health care provider data presented in this Iowa Health Fact Book.

OSCEP provides an up-to-date inventory of physicians, physician assistants, advanced registered nurse practitioners, pharmacists, and dentists, which facilitates tracking trends in Iowa health professionals and provides feedback to the health science colleges on the progress of their programs.

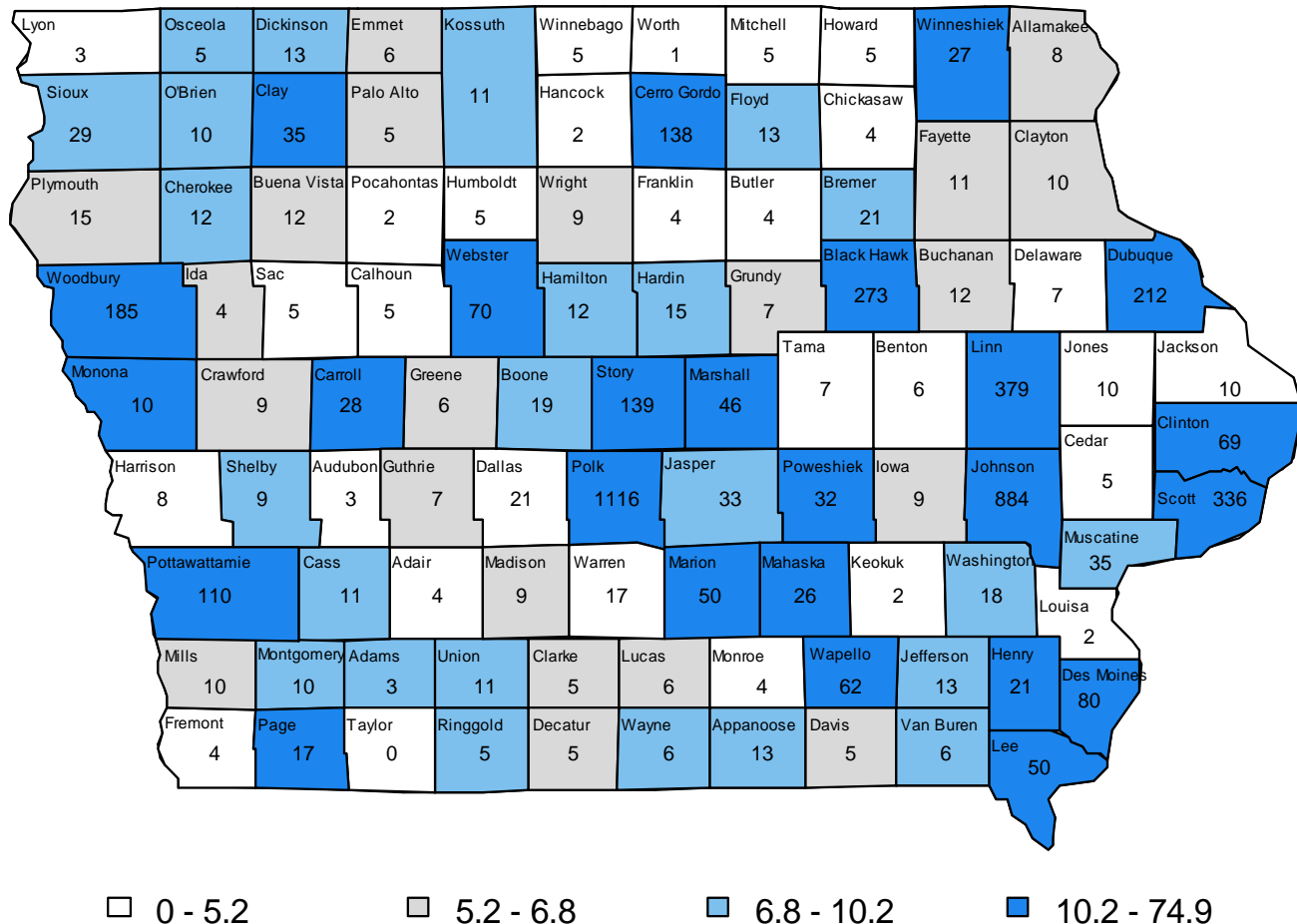
The Board of Nursing enforces and regulates nursing education, nursing practice, and continuing education for nurses. It sets standards, provides evaluation and licensing, and investigates complaints about licensed practical nurses, registered nurses, and advanced registered nurse practitioners. Its mission is “to protect the public health, safety and welfare of Iowans by ensuring that nursing is practiced by competent licensed individuals within their practice field.” Data related to the nursing supply are housed within the Board of Nursing.

The Bureau of Emergency Medical Services (EMS) is a regulatory agency that establishes initial training, continuing education, and renewal requirements leading to certification of emergency medical care providers, including those presented here. The EMS Bureau is also responsible for the authorization and regulation of EMS service programs (levels First Responder through Paramedic), and a statewide trauma system. In addition, the Bureau has statewide programs dealing with system development initiatives, injury prevention, and emergency medical services for children.

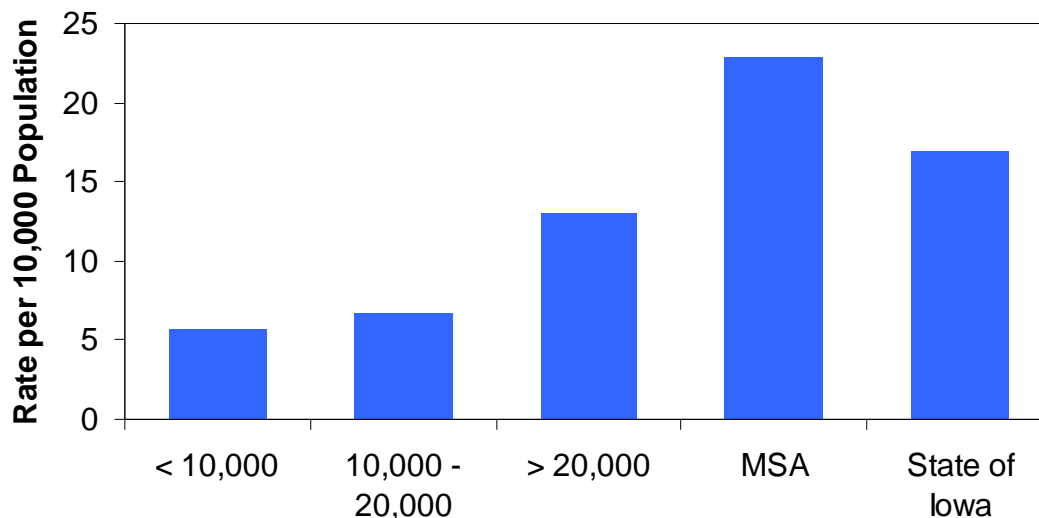
Seventeen other licensing boards are housed at the Iowa Department of Public Health, which collect data about practice, licensing/certification, and other supply information.

Total Physicians

2007 Counts and Crude Rates per 10,000 (shaded)



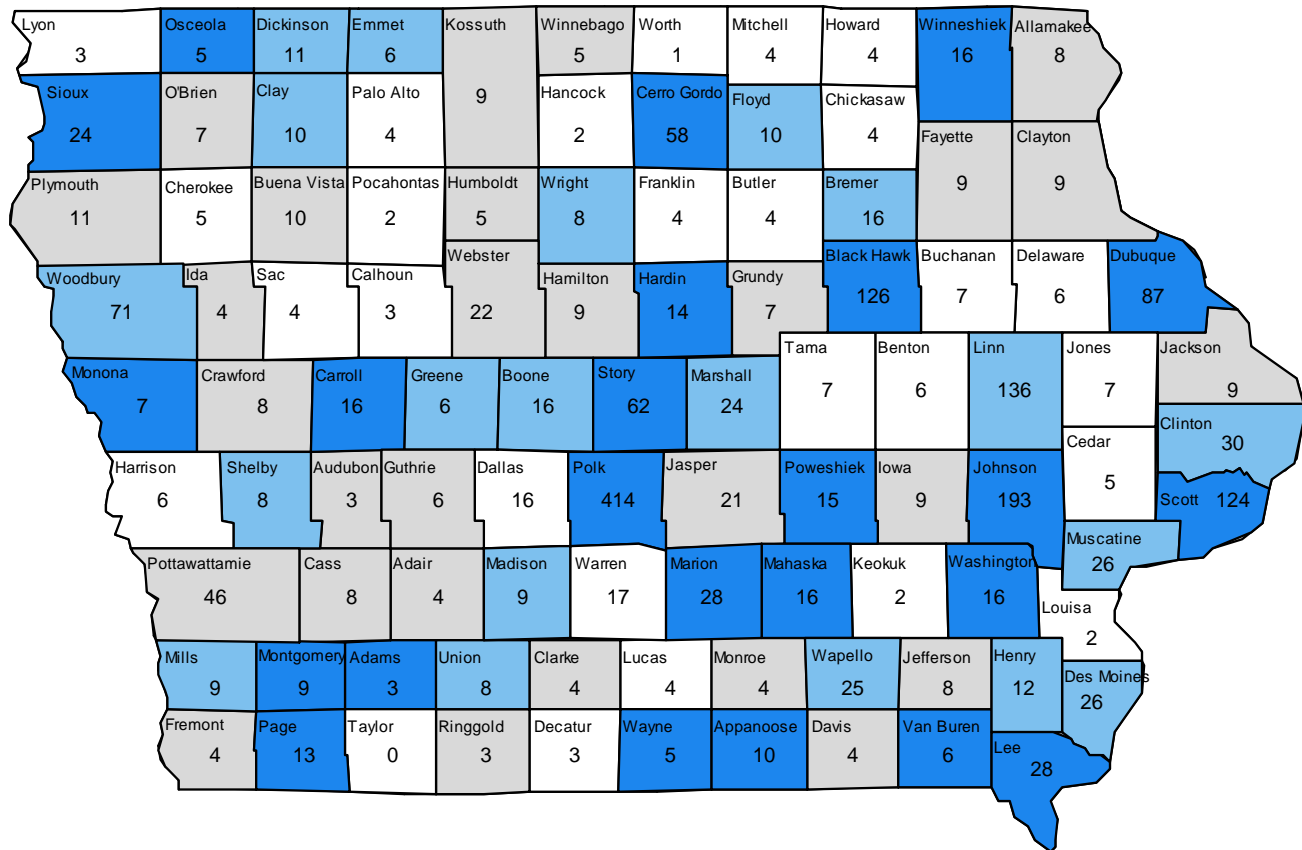
2007 Crude Rates by County Group



Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

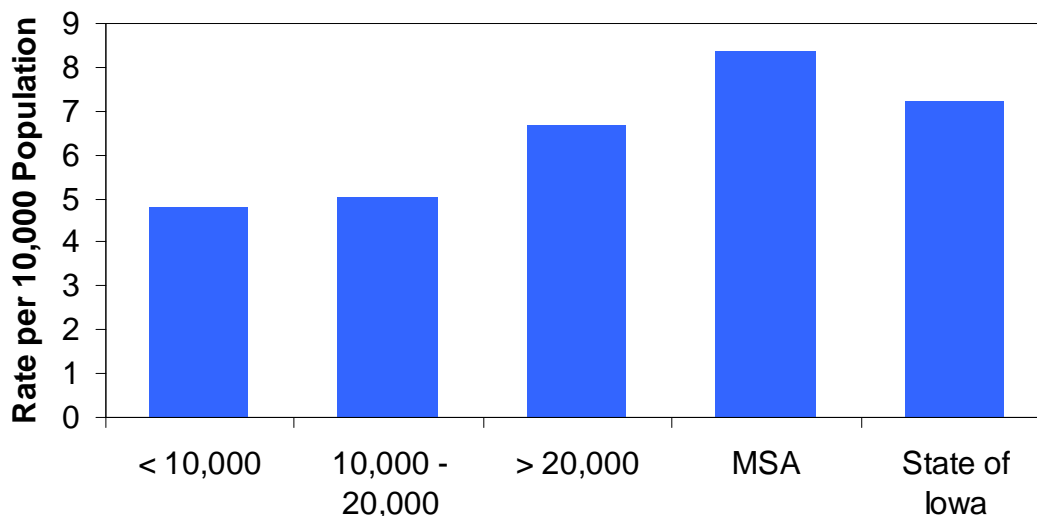
Primary Care Physicians¹

2007 Counts and Crude Rates per 10,000 (shaded)



□ 0 - 4.2 □ 4.2 - 5.7 □ 5.7 - 7 □ 7 - 16.4

2007 Crude Rates by County Group

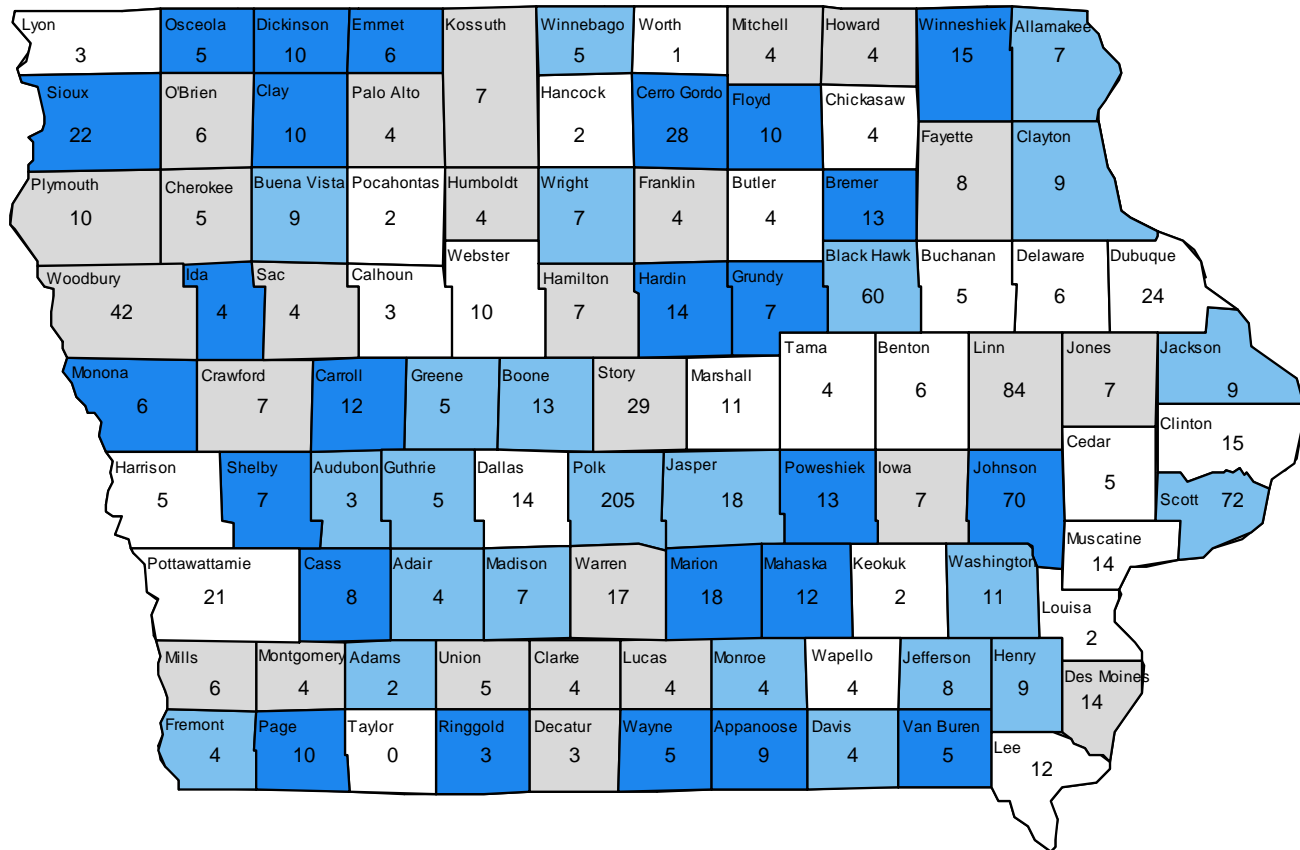


¹Includes Family Practice, Internal Medicine, Pediatric, and Obstetrics/Gynecology physicians

Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

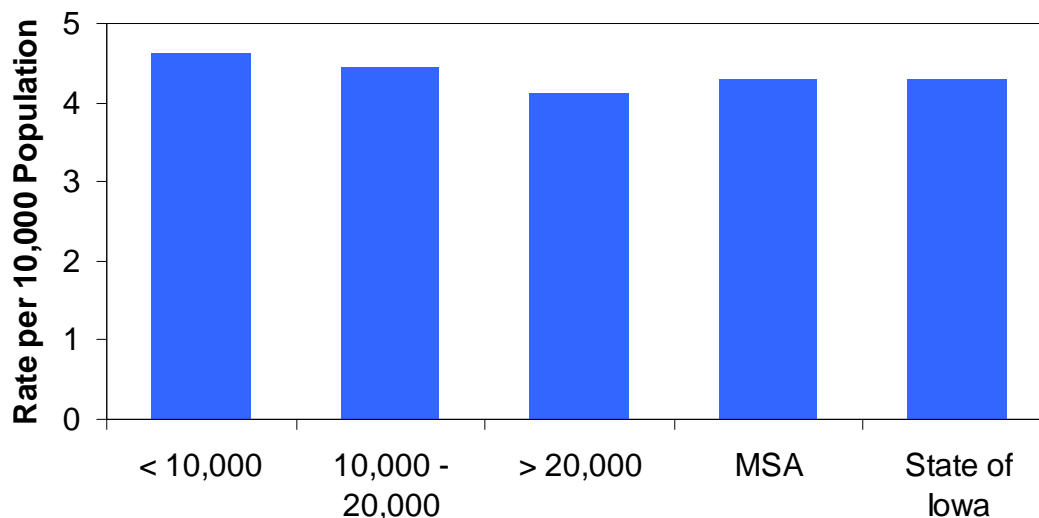
Family Practice Physicians

2007 Counts and Crude Rates per 10,000 (shaded)



□ 0 - 3.4 □ 3.4 - 4.4 ■ 4.4 - 5.3 ■ 5.3 - 7.9

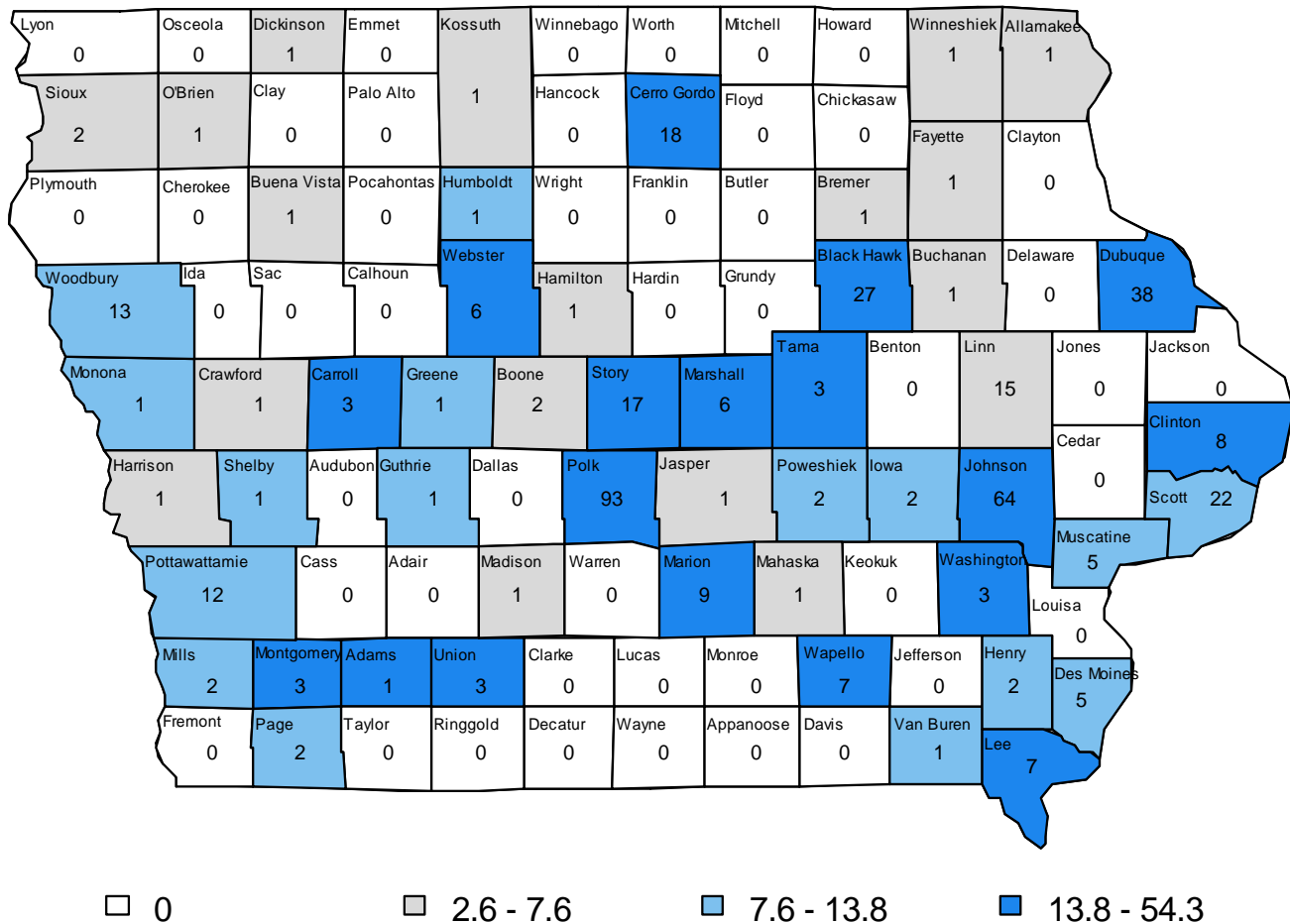
2007 Crude Rates by County Group



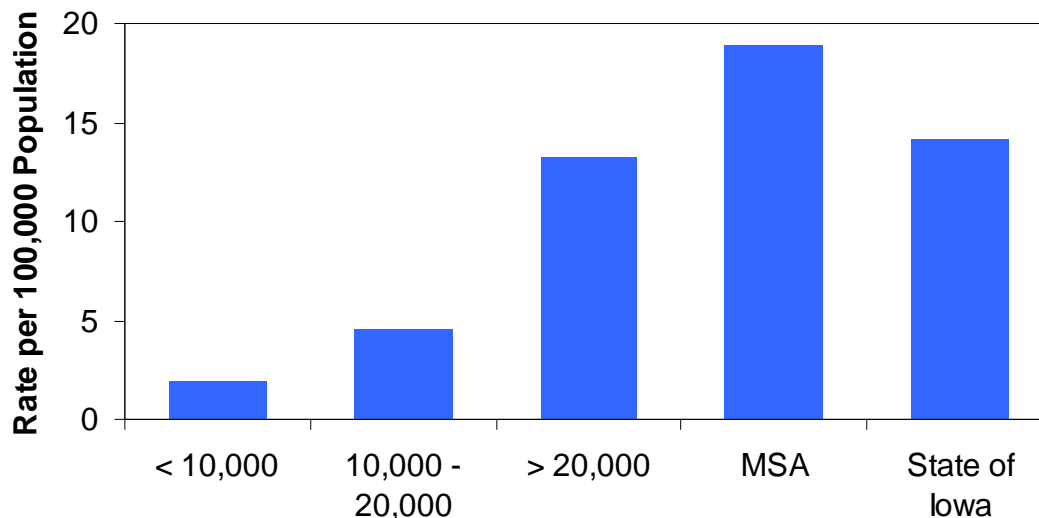
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

Internal Medicine Physicians

2007 Counts and Crude Rates per 100,000 (shaded)



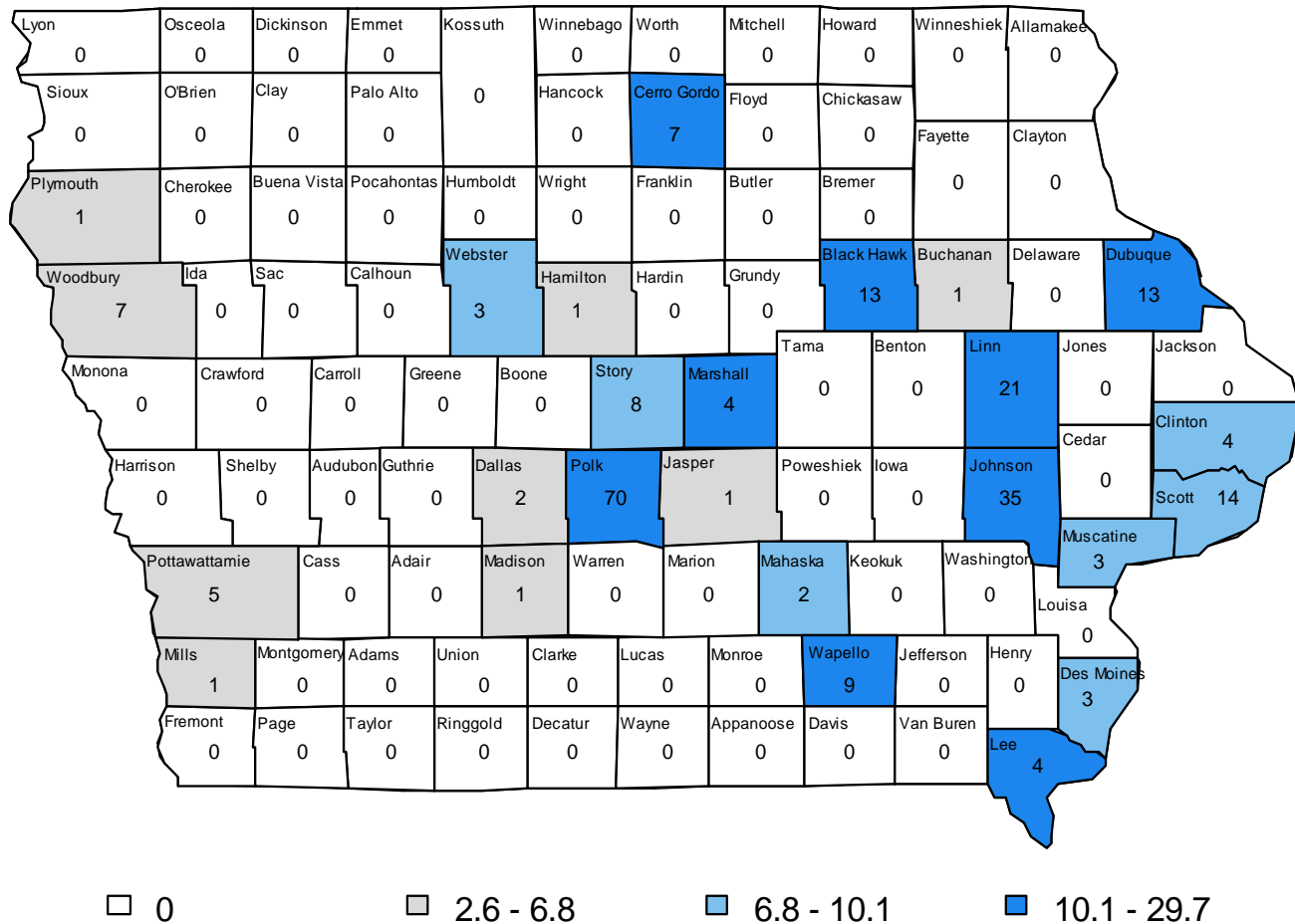
2007 Crude Rates by County Group



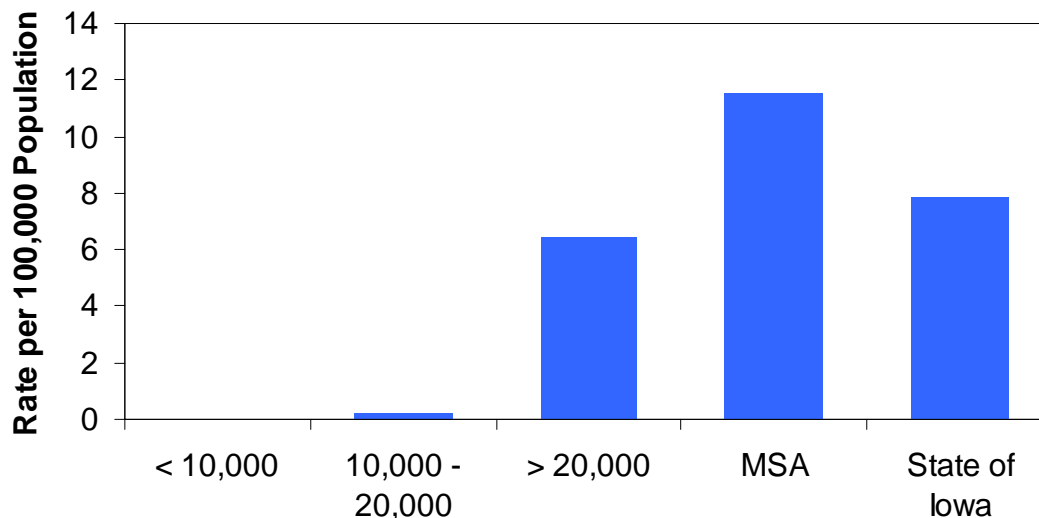
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

Pediatric Physicians

2007 Counts and Crude Rates per 100,000 (shaded)



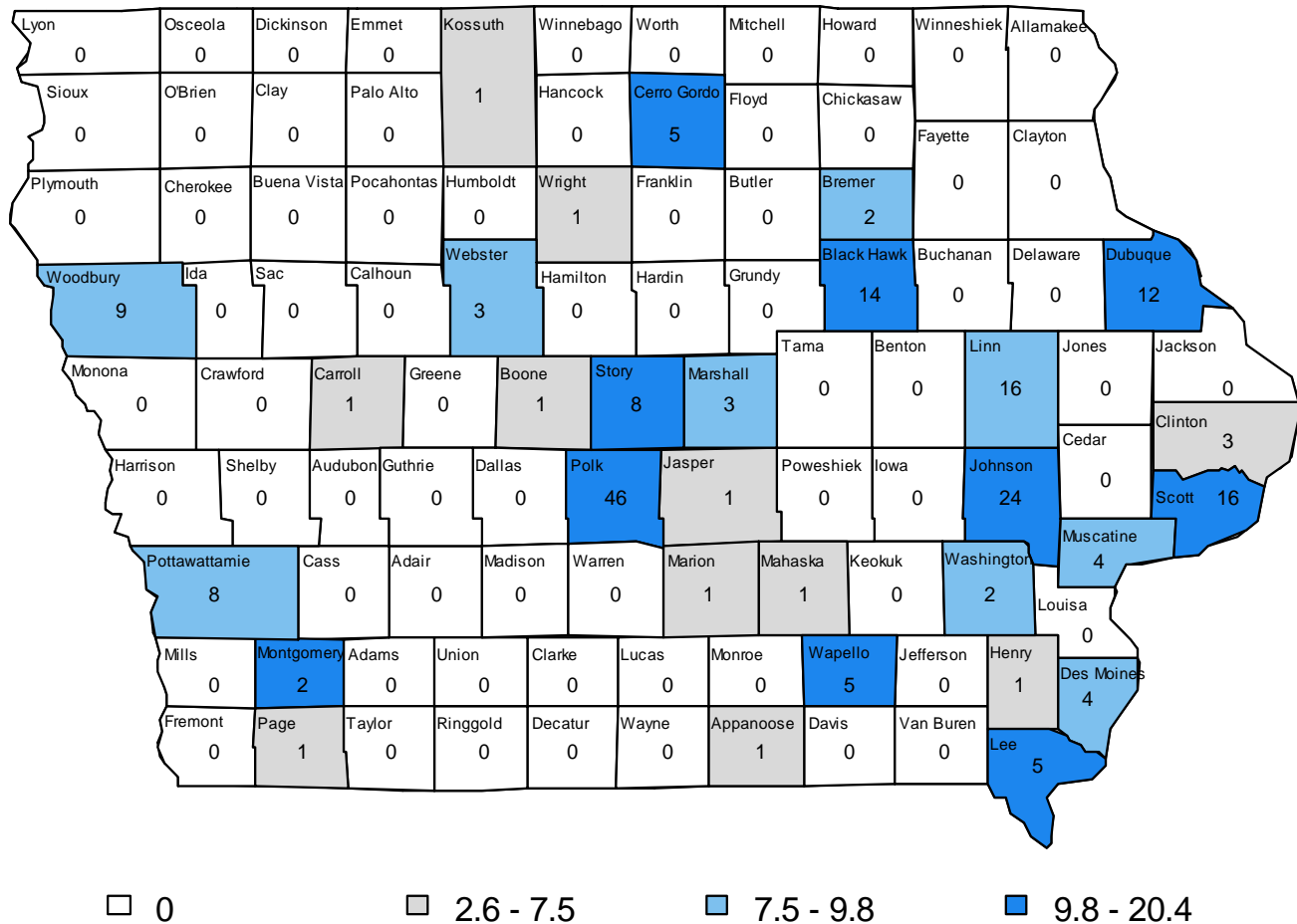
2007 Crude Rates by County Group



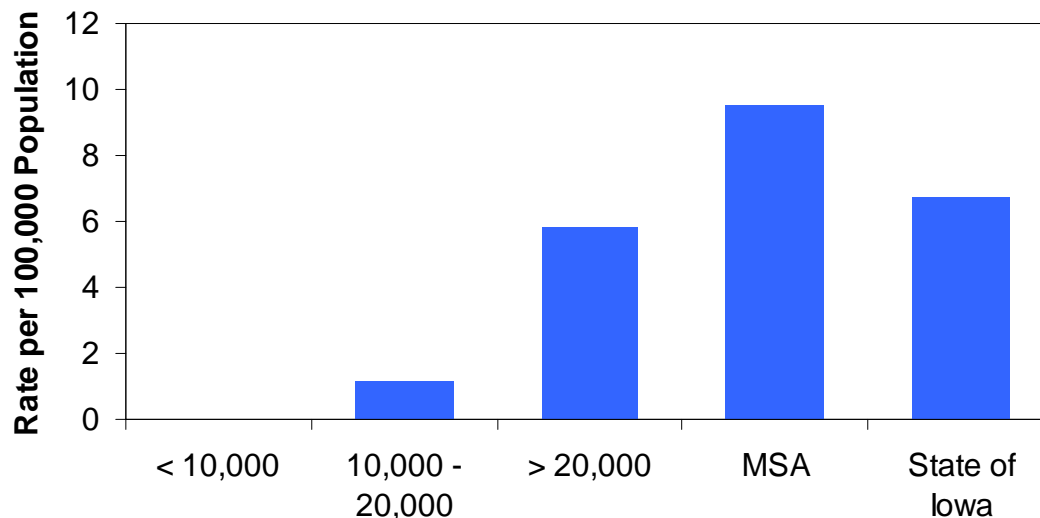
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

Obstetrics/Gynecology Physicians

2007 Counts and Crude Rates per 100,000 (shaded)



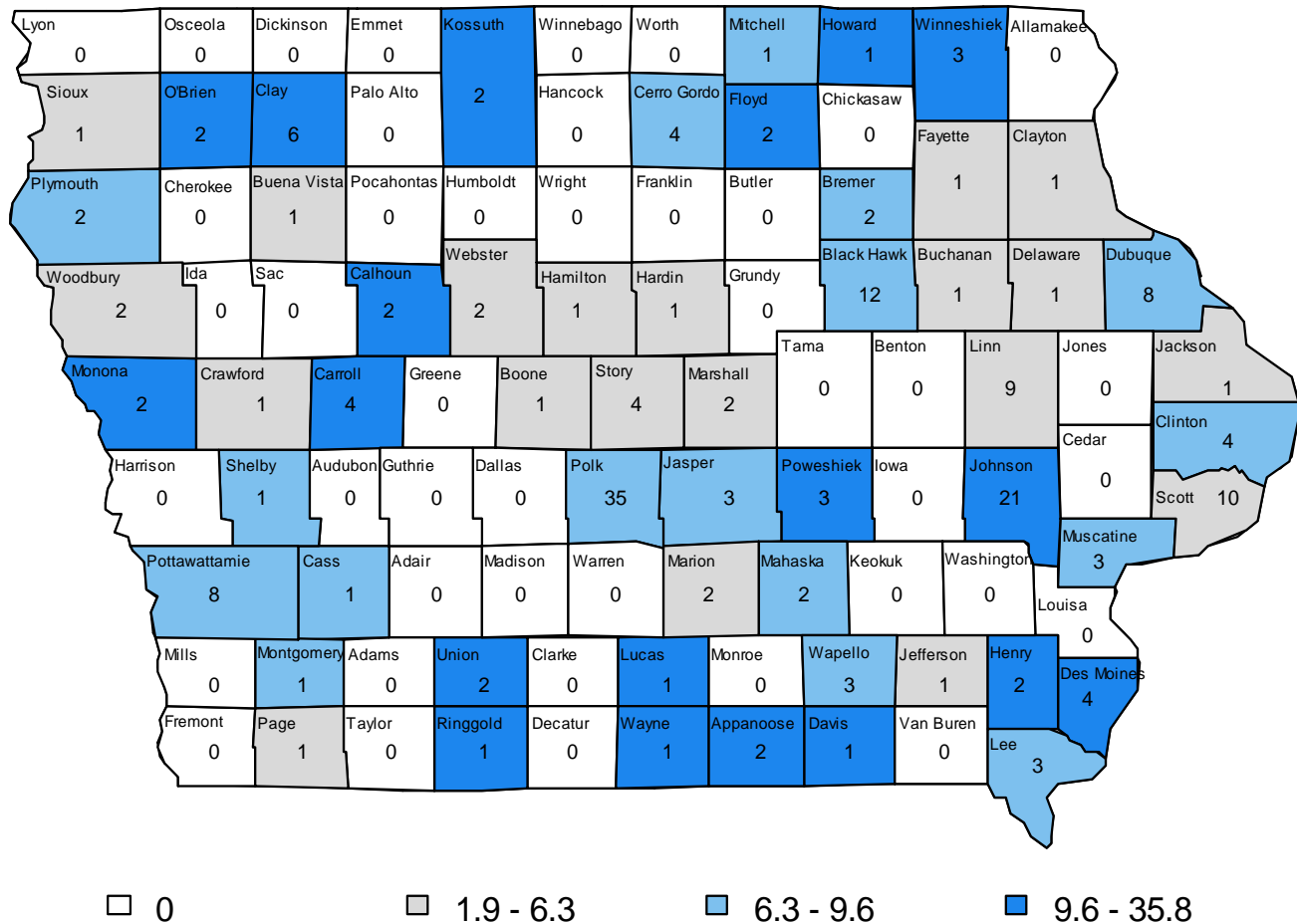
2007 Crude Rates by County Group



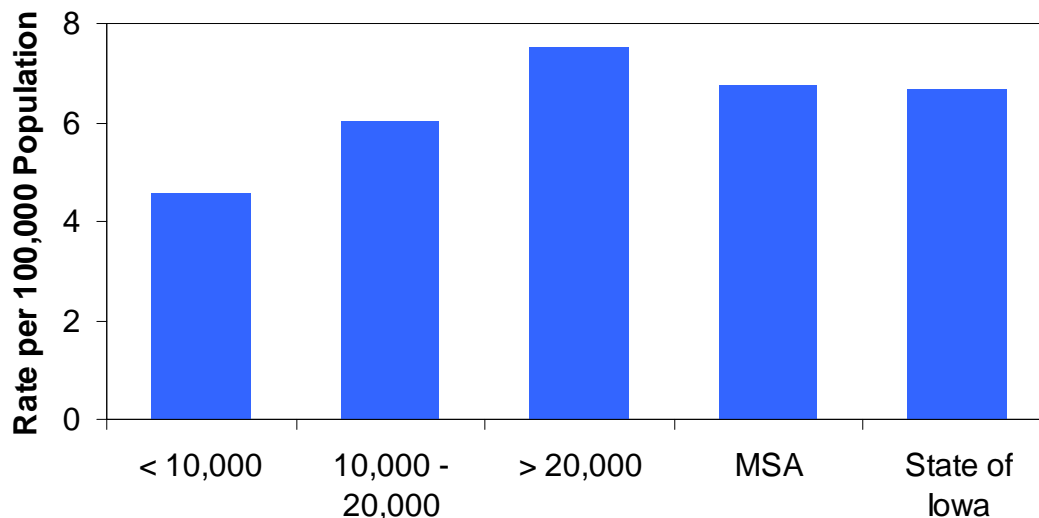
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

General Surgeons

2007 Counts and Crude Rates per 100,000 (shaded)



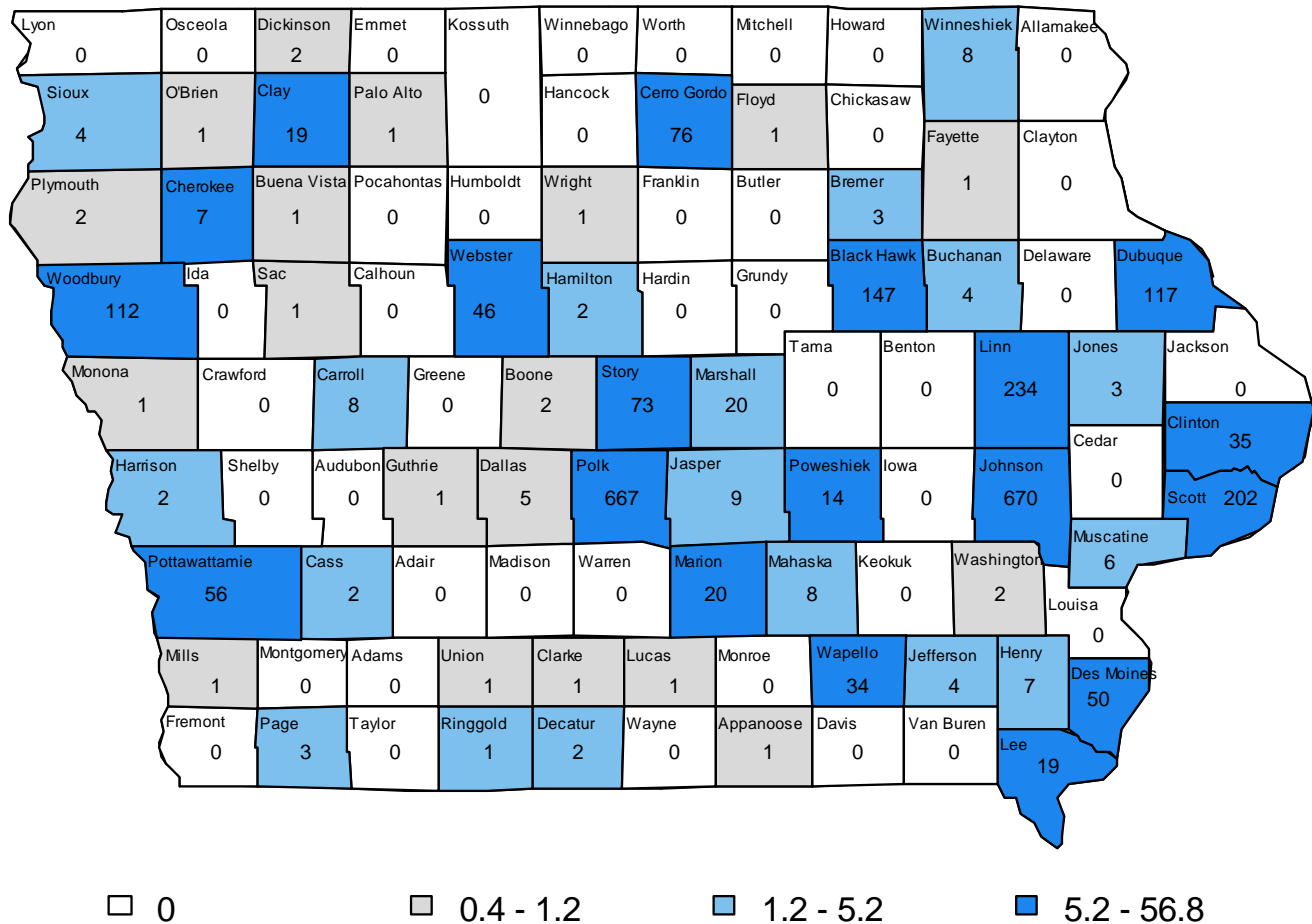
2007 Crude Rates by County Group



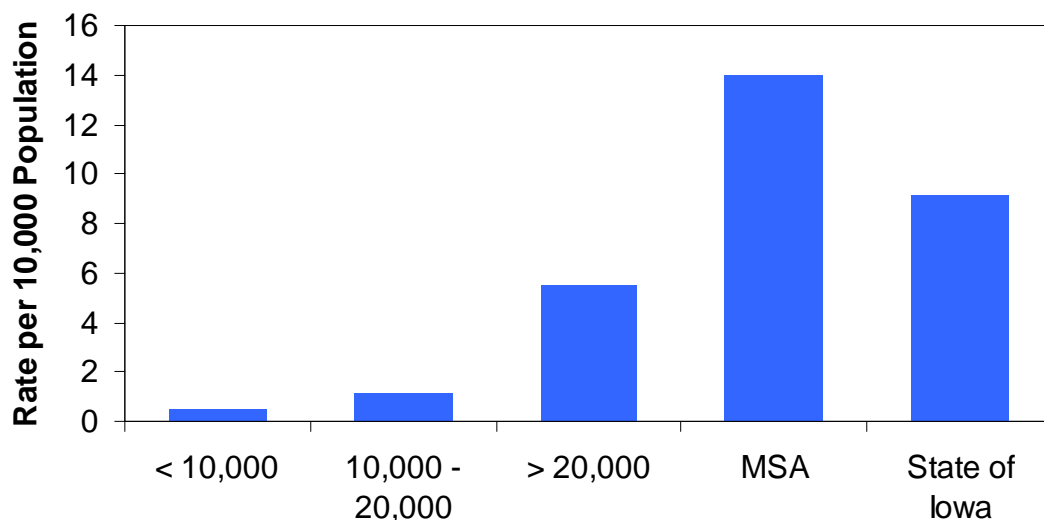
Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

Other Specialty Physicians

2007 Counts and Crude Rates per 10,000 (shaded)



2007 Crude Rates by County Group

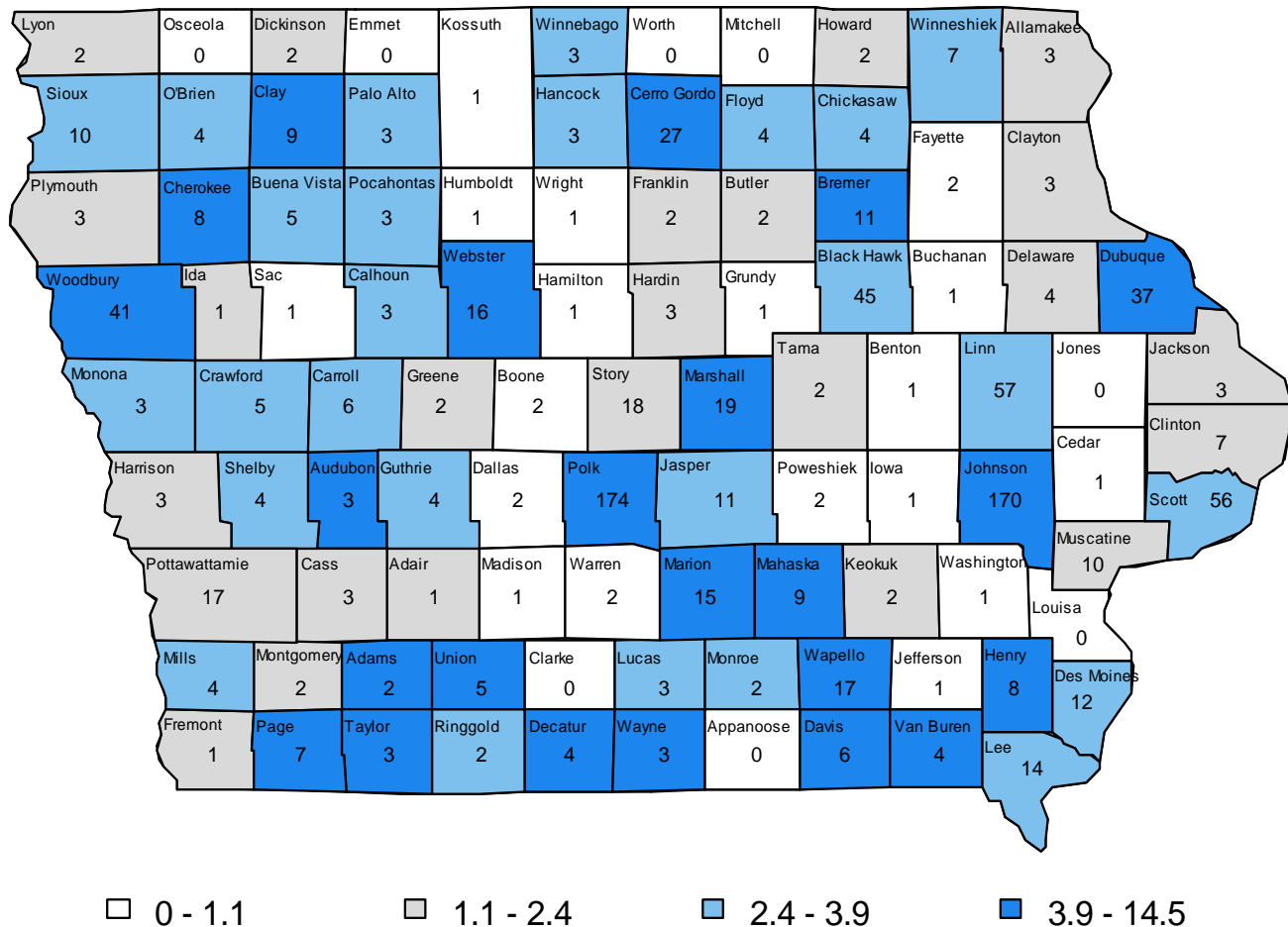


Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

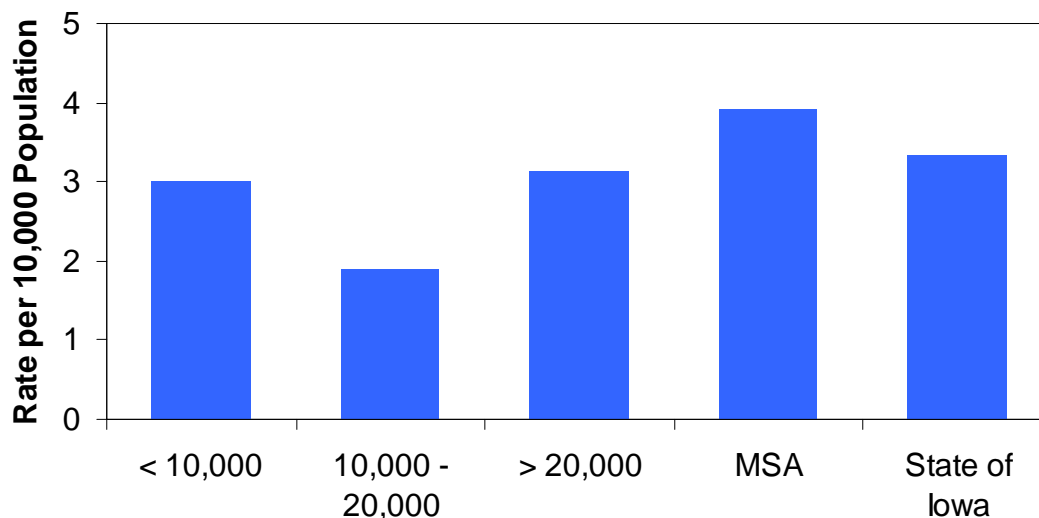
[illegible]

Advanced Practical Nurses

2007 Counts and Crude Rates per 10,000 (shaded)



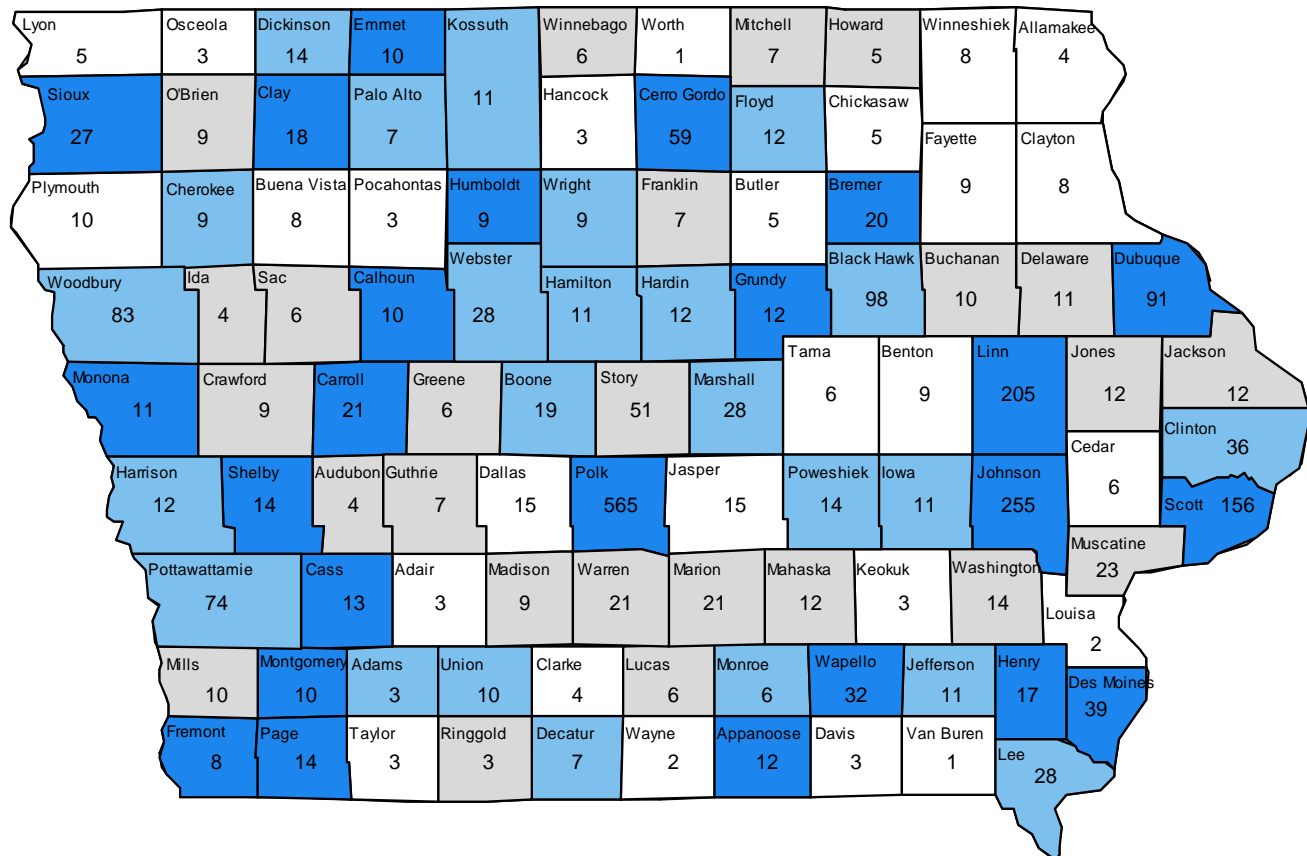
2007 Crude Rates by County Group



Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

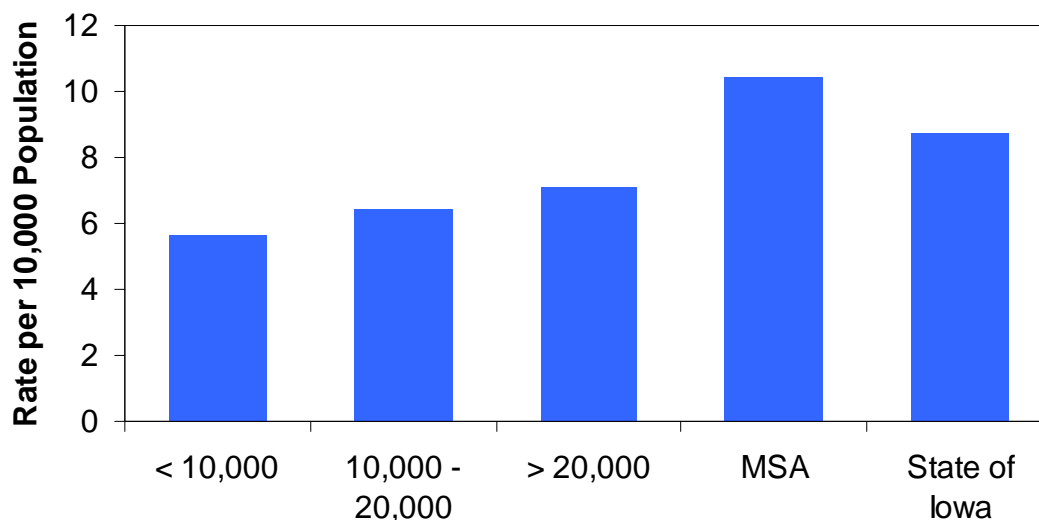
Pharmacists

2007 Counts and Crude Rates per 10,000 (shaded)



□ 1.2 - 4.6 □ 4.6 - 6.6 □ 6.6 - 8.3 ■ 8.3 - 21.7

2007 Crude Rates by County Group

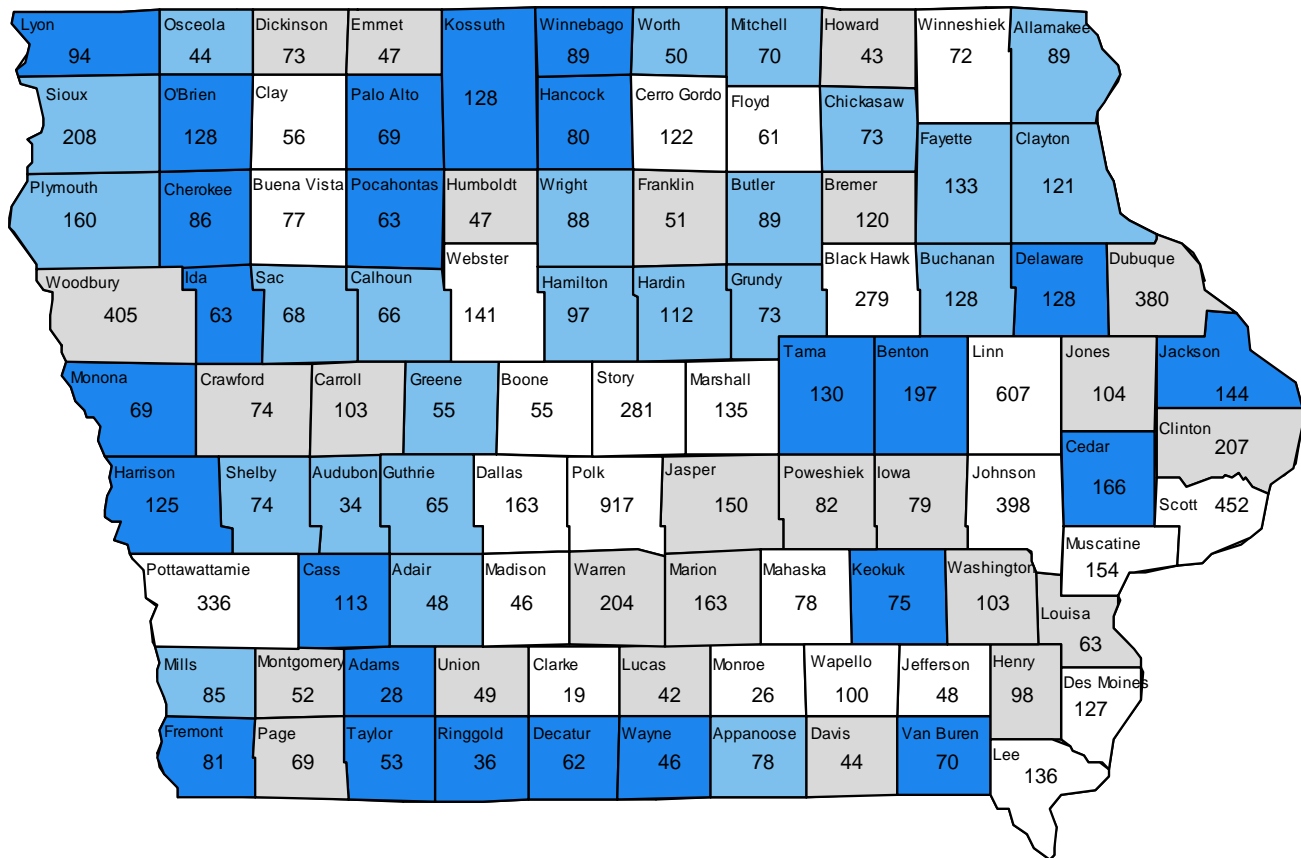


Source: Office of Statewide Clinical Education Programs, College of Medicine, University of Iowa

[illegible]

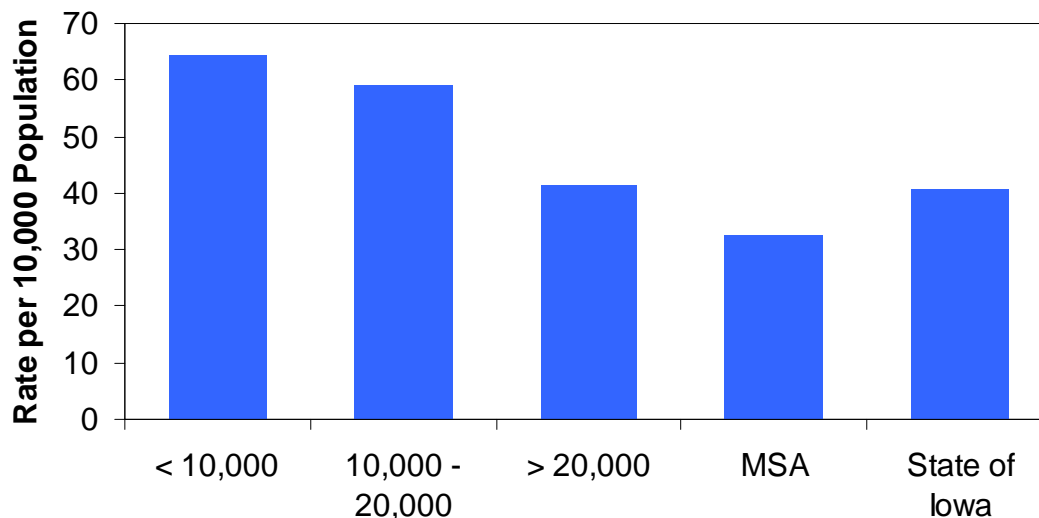
Emergency Care Providers – Total¹

2007 Counts and Crude Rates per 10,000 (shaded)



□ 20.6 - 38.9 □ 38.9 - 53.2 □ 53.2 - 66.6 □ 66.6 - 104.7

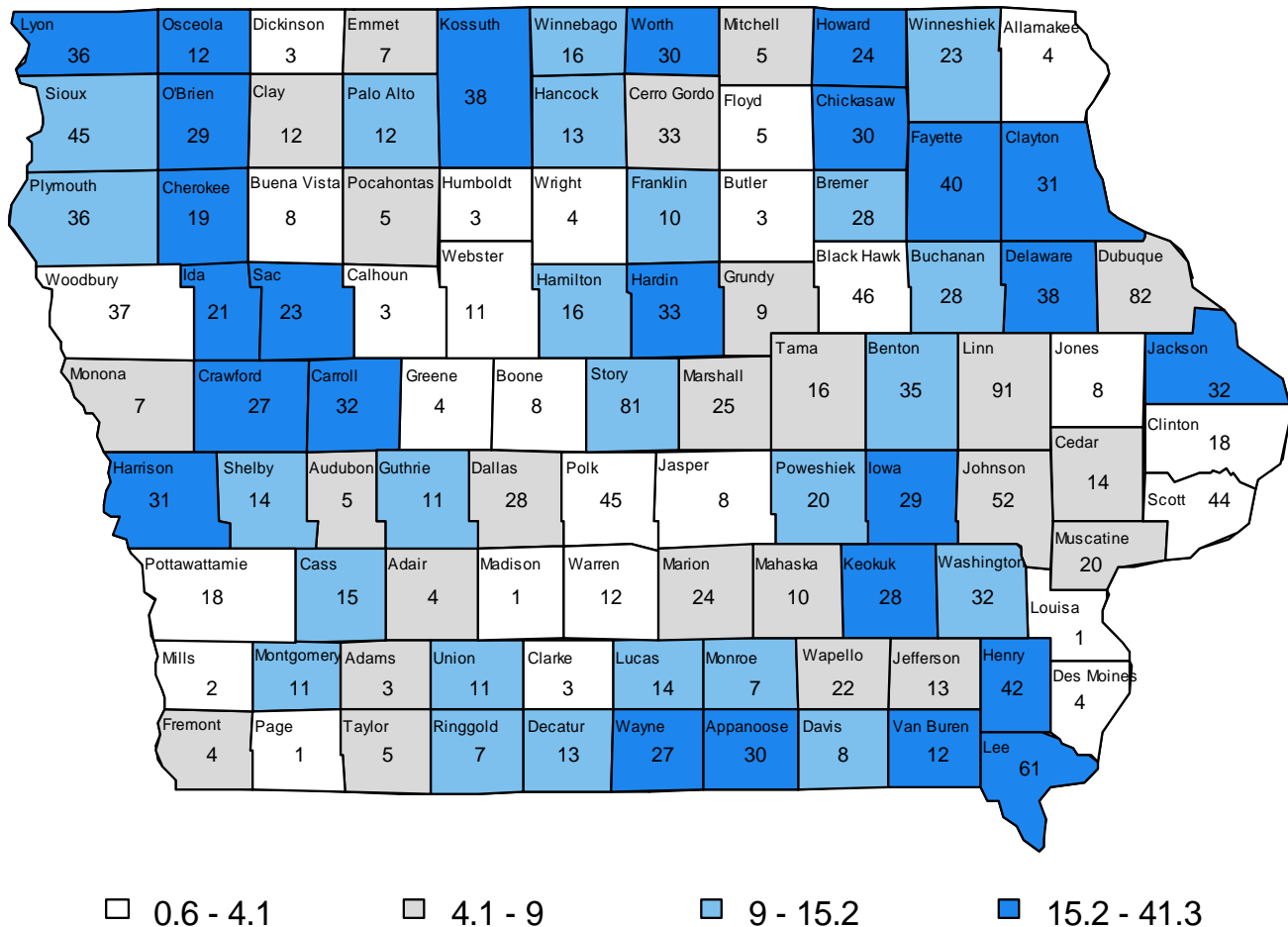
2007 Crude Rates by County Group



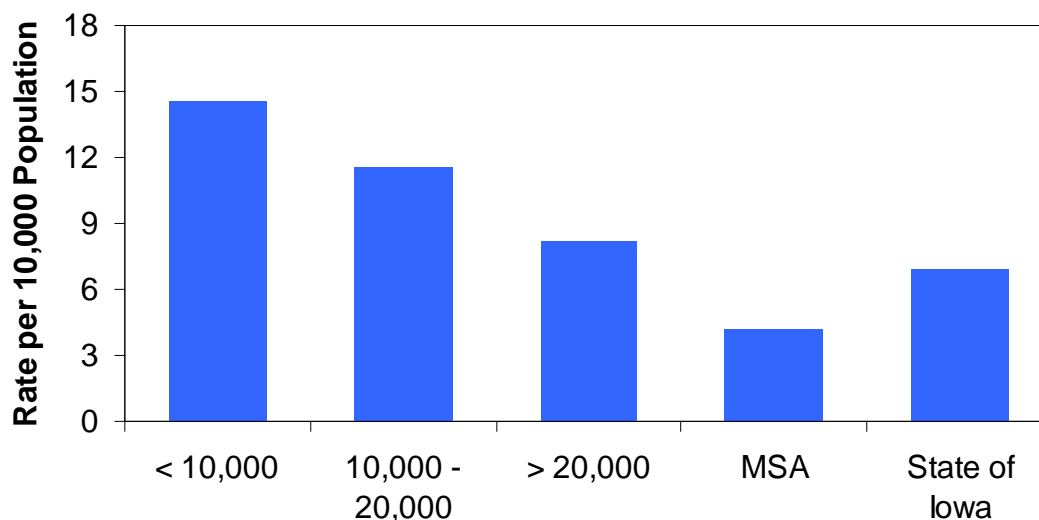
¹Includes First Responder, Basic, Intermediate, Paramedic, and Paramedic Specialist

First Responders

2007 Counts and Crude Rates per 10,000 (shaded)



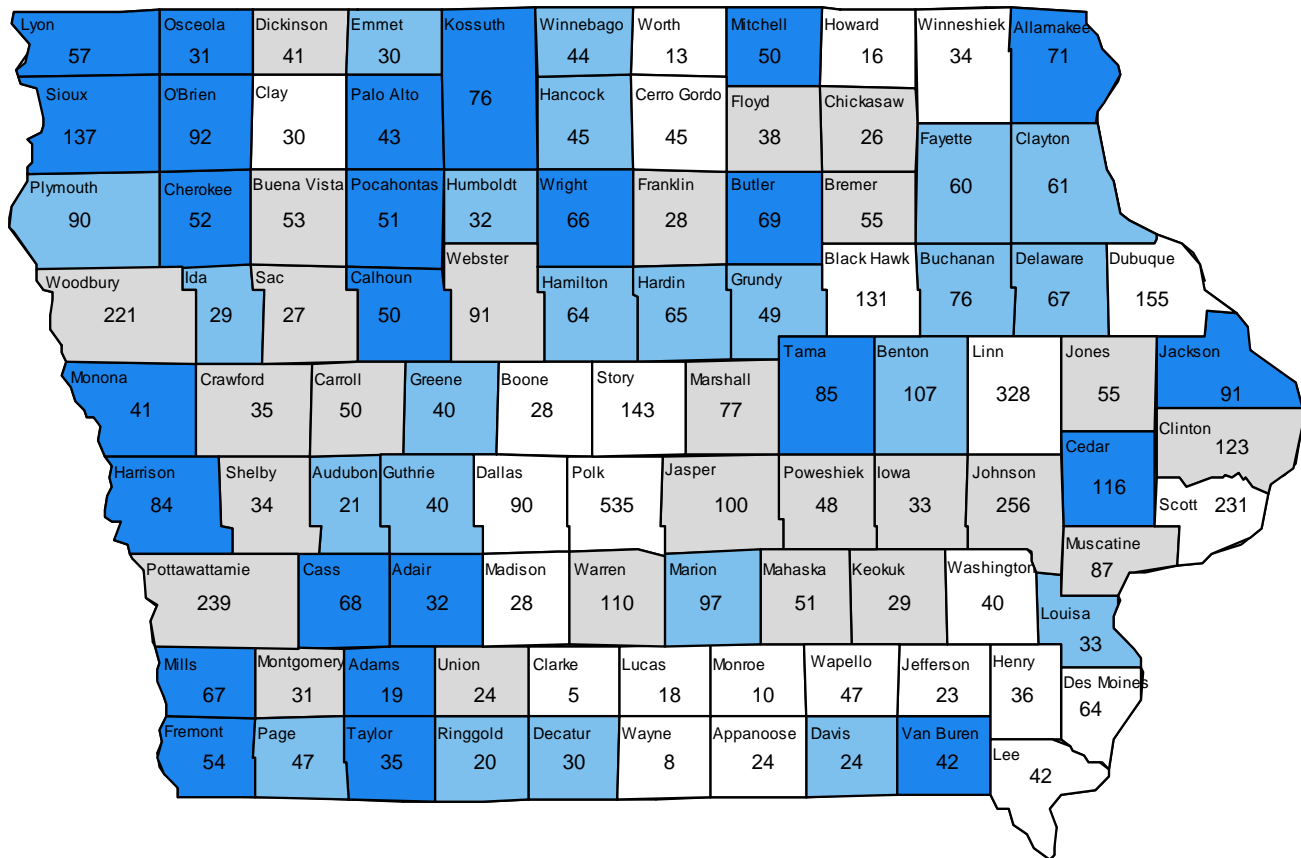
2007 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

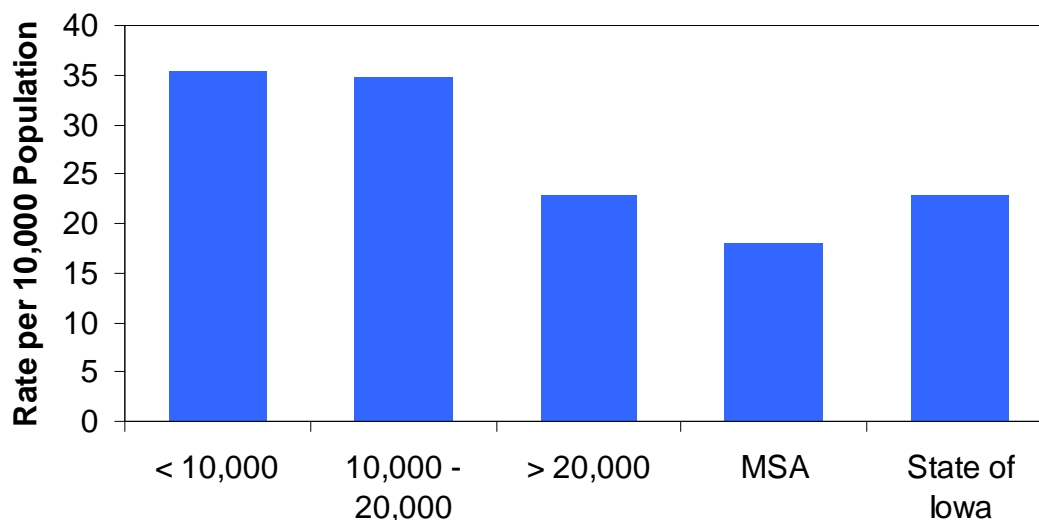
Emergency Medical Technicians – Basic

2007 Counts and Crude Rates per 10,000 (shaded)



□ 5.4 - 19.2 □ 19.2 - 27.3 □ 27.3 - 41.2 □ 41.2 - 69.8

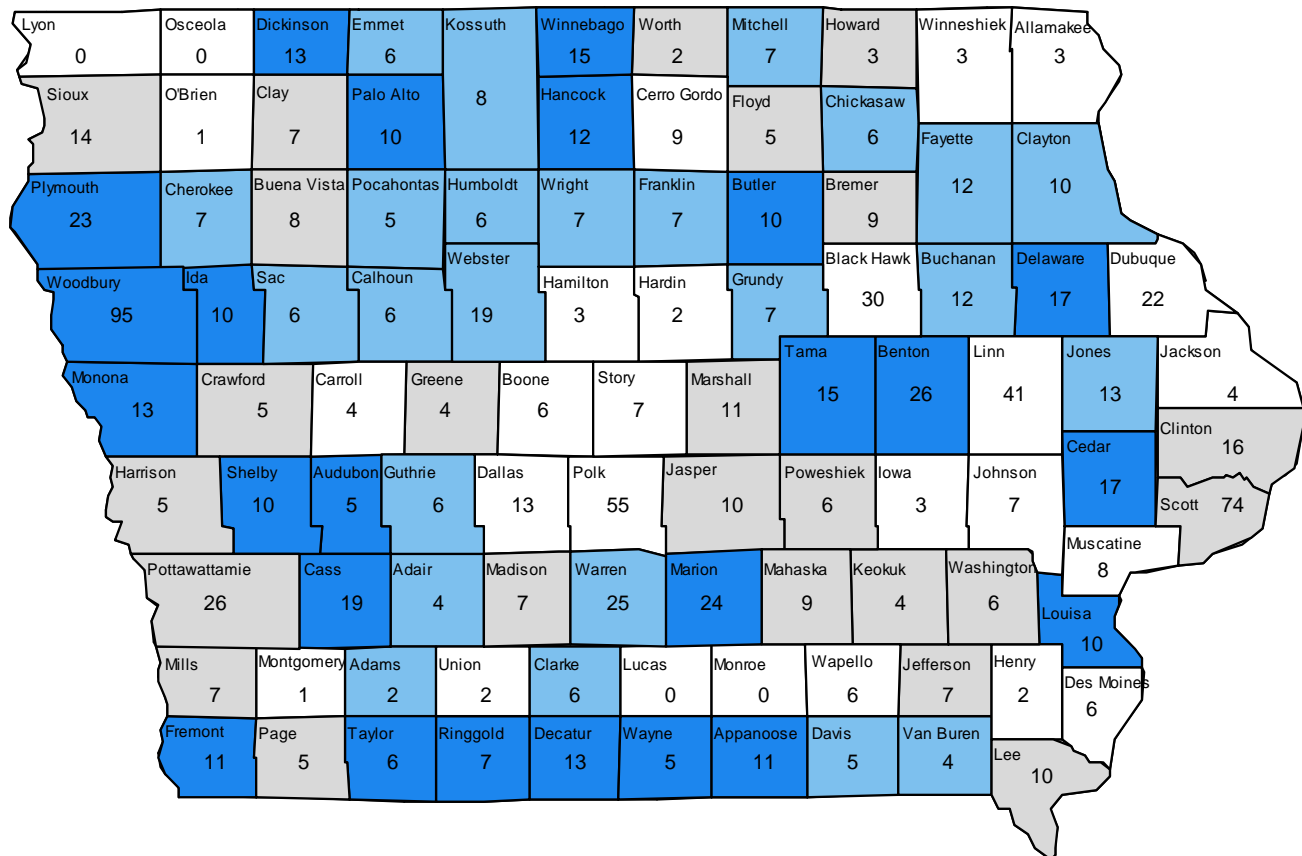
2007 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

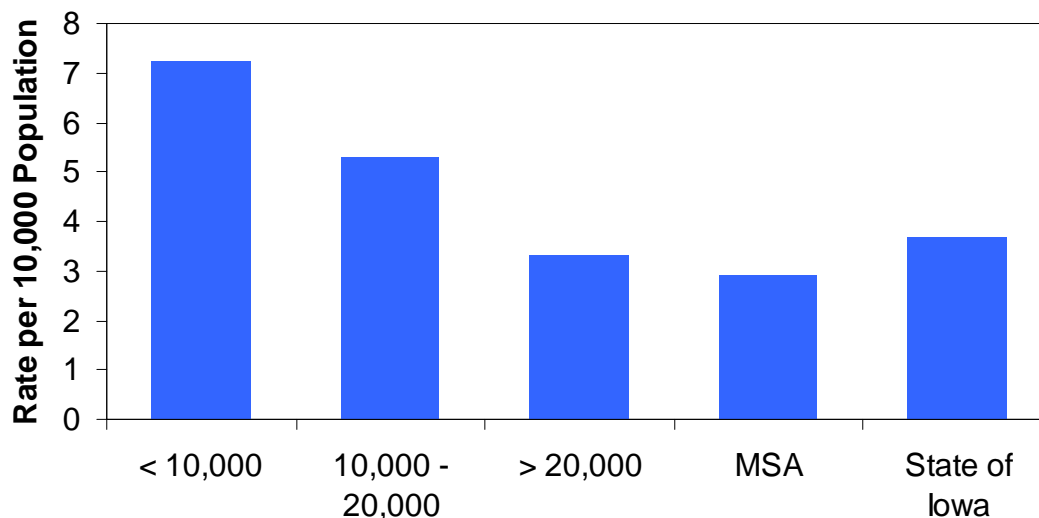
Emergency Medical Technicians – Intermediate

2007 Counts and Crude Rates per 10,000 (shaded)



□ 0 - 2.4 □ 2.4 - 4.6 □ 4.6 - 6.6 ■ 6.6 - 15.1

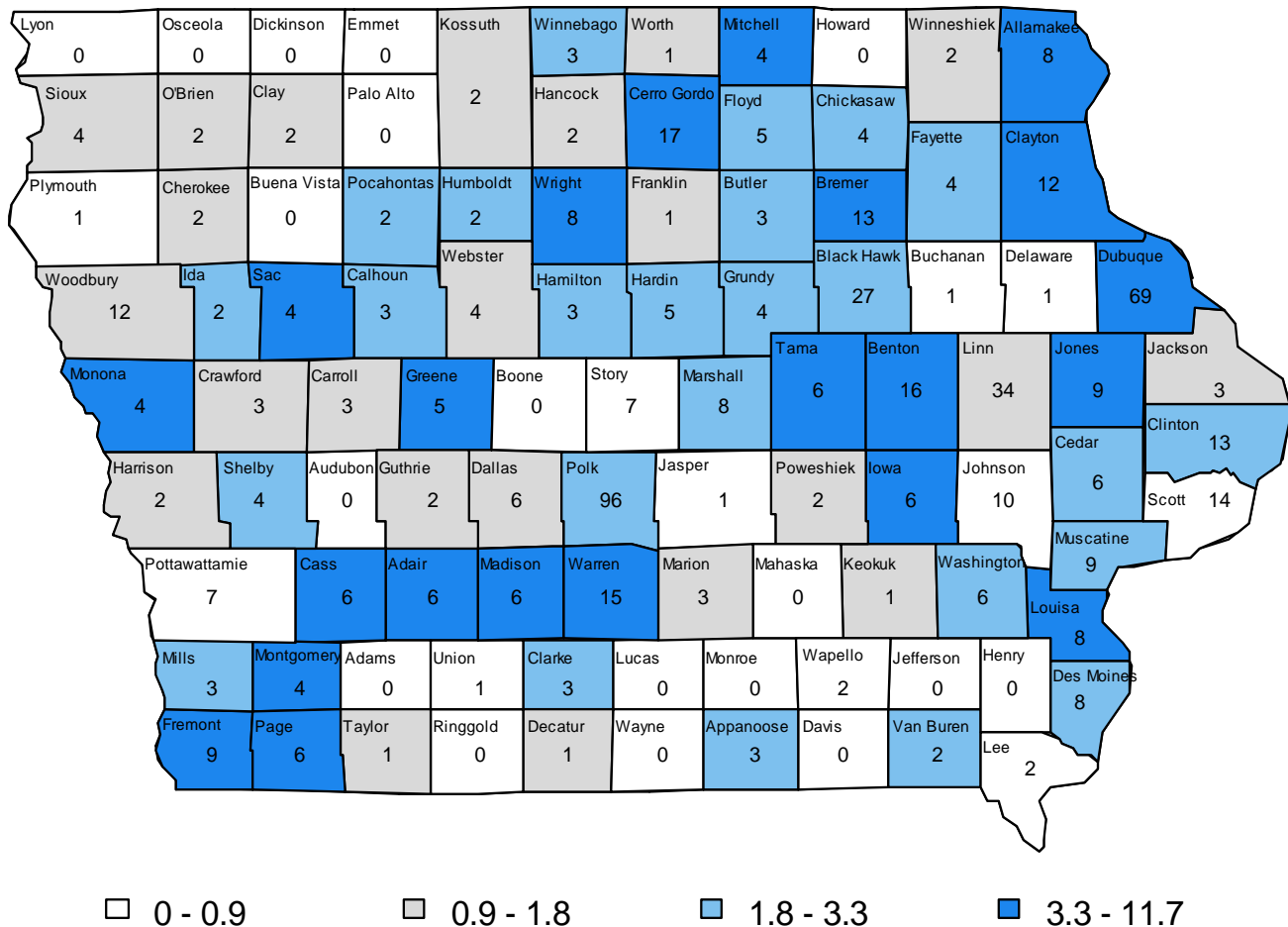
2007 Crude Rates by County Group



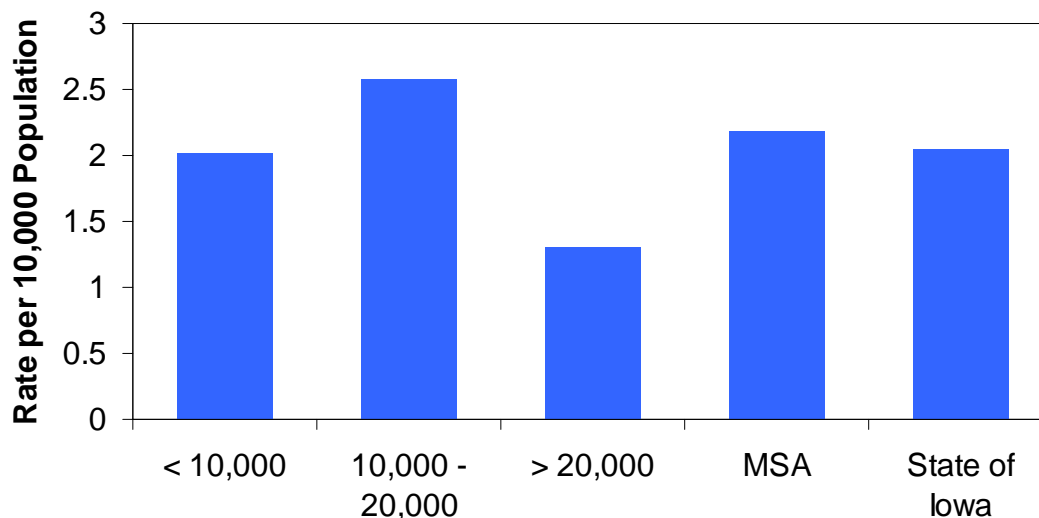
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Emergency Medical Technicians – Paramedics

2007 Counts and Crude Rates per 10,000 (shaded)



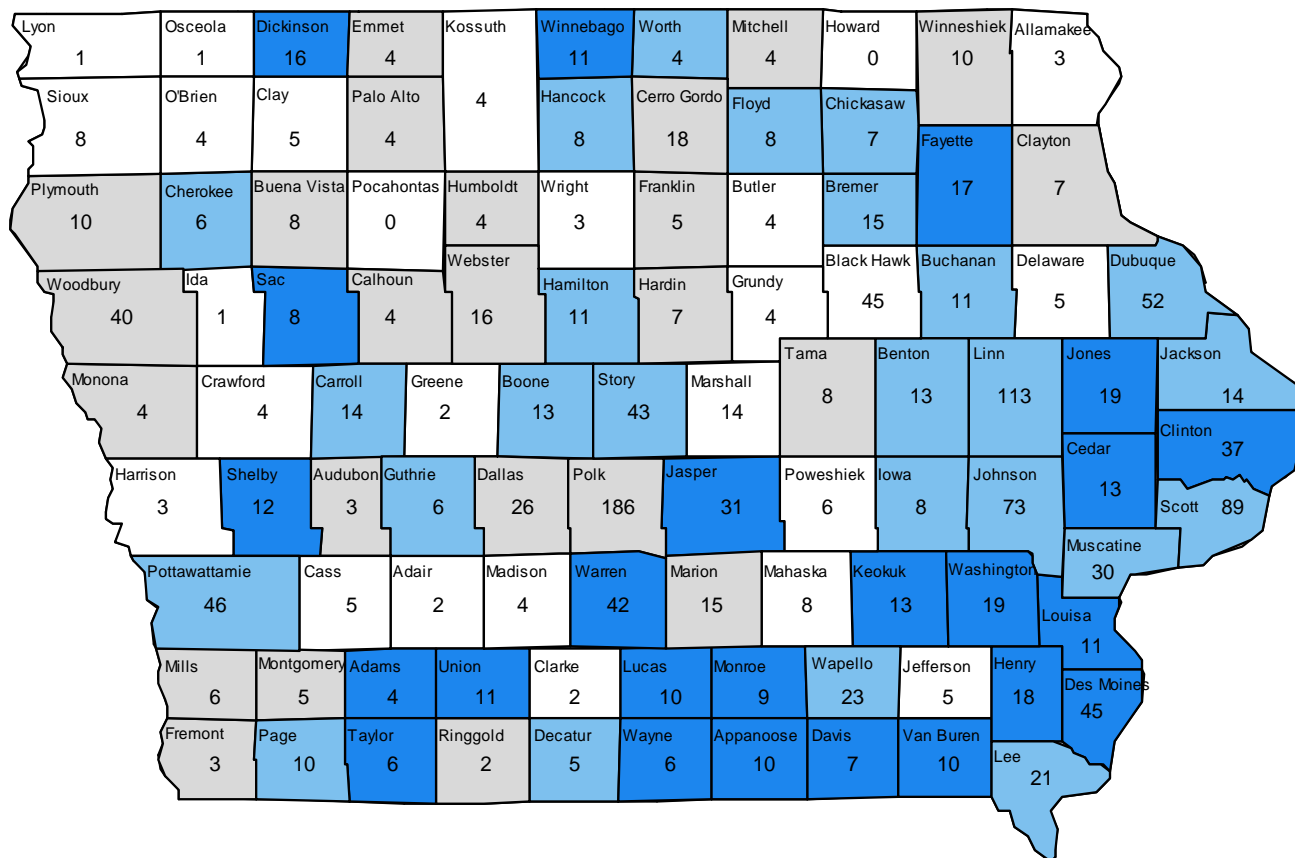
2007 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

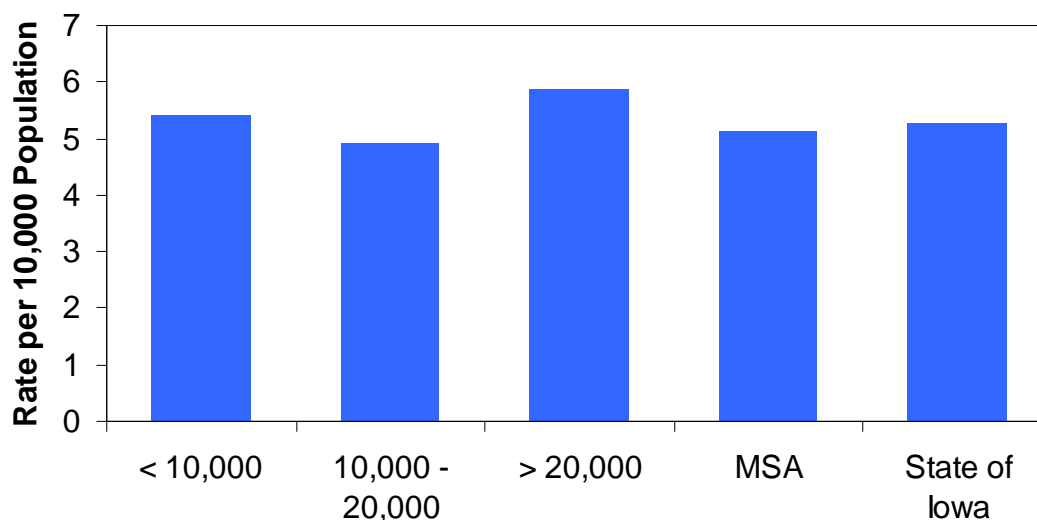
Emergency Medical Technicians – Paramedic Specialists

2007 Counts and Crude Rates per 10,000 (shaded)



□ 0 - 3.6 □ 3.6 - 4.8 □ 4.8 - 7 ■ 7 - 12.8

2007 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

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Health Care Facilities

The information presented on health care facilities comes from the Division of Health Facilities in the Iowa Department of Inspections and Appeals (DIA). This state agency is responsible for inspection of all Chapter 135C licensed health care facilities in Iowa, including those presented in the 2007 Iowa Health Fact Book. Under state law the DIA is responsible for the inspection and licensure of Hospitals (135B), Birth Centers (135G), Hospices (135J) and Psychiatric Medical Institutes for Children (135H). This agency also conducts inspections of various Medicare/Medicaid entities (e.g., skilled nursing facilities, home health agencies, hospices, hospitals, CLIA labs, etc.) through contract with the Health Care Financing Administration (HCFA), and investigates complaints of substandard care or services in these entities. Additional information may be accessed through their web site: www.dia-hfd.state.ia.us.

There is only one Intermediate Care Facility for Persons with Mental Illness in Iowa (a 25-bed unit in Davis County), so statewide data for this type of facility are not presented.

FACILITY TYPES REGULATED BY THE STATE OF IOWA DIVISION OF HEALTH FACILITIES...

- Ambulatory Surgical Centers
- Birth Centers
- Chronic Confusion or Dementing Illness Units
- Community Mental Health Centers
- Comprehensive Out-Patient Rehabilitation Facilities
- Critical Access Hospitals
- End-Stage Renal Disease Facilities
- Home Health Agencies
- Hospices
- Hospital Based (Distinct-Part) Nursing Facility Units (Covered by Medicaid)
- Hospital Based (Distinct-Part) Skilled Nursing Facility Units (Covered by Medicaid)
- Hospital Based (Distinct-Part) Skilled Nursing Facility/Nursing Facility Units (Covered by Medicaid)
- Hospital Based Intermediate Care Facilities for the Mentally Retarded (Covered by Medicaid)
- Hospitals
- Hospitals with Psychiatric Units excluded under the Medicare Prospective Payment System
- Hospitals with Swing-Beds
- Intermediate Care Facilities for Persons with Mental Illness
- Intermediate Care Facilities for the Mentally Retarded
- Laboratories Covered under the (Federal) Clinical Laboratories Improvement Amendments 1988 (CLIA '88)
- Nursing Facilities
- Organ Procurement Organizations
- Portable X-Ray Service Suppliers
- Psychiatric Medical Institutions for Children
- Rehabilitation Agencies with Out-Patient Physical Therapy/Out-Patient speech Pathology/Out-Patient Occupational Therapy Providers
- Residential Care Facilities
- Residential Care Facilities for Persons with Mental Illness
- Residential Care Facilities for the Mentally Retarded
- Rural Health Clinics
- Specialized 3-5 Bed Facilities

Community and Migrant Health Centers

Community and migrant health centers provide affordable, accessible, and acceptable primary health care to Iowans. These centers primarily serve indigent, medically-underserved, and under-insured populations and assist special populations through grants and programs.

Community and migrant health centers are the safety net providers. They provide several health services to the community, including comprehensive health services with a variety of physician specialties, general dentistry and community health programs involving oral health education and dental screening, prenatal care, family planning, health screenings, immunizations, case management, and pharmacies. Centers may be affiliated with a regional health system that can provide access to substantial support systems.

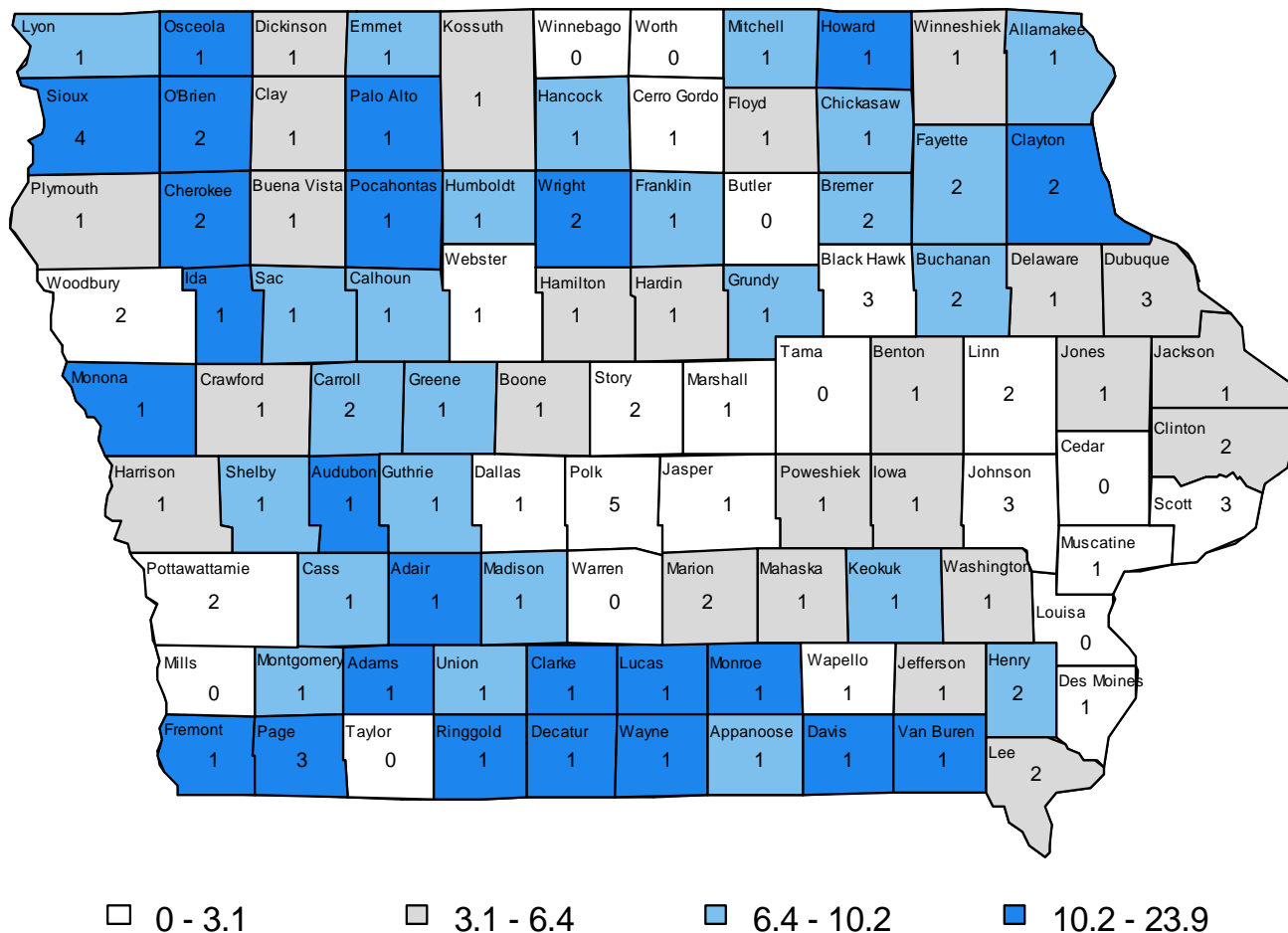
Community Health Centers are funded by Section 330 funds of the Public Health Service Act. Iowa has eight such centers (plus the Des Moines Health Center, which provides similar services). They are required to provide primary health services, dental services, mental health services, prevention, education, and case management. Patients cannot be turned away on the basis of ability to pay. A sliding fee scale based on income is mandated. The C/MHC model is a non-profit corporation whose board members must be members of the community and at least one percent of the board must be patients of the health center. Further information on Community Health Centers can be obtained from the Iowa/Nebraska Primary Care Association (IA/NEPCA) at the web site www.ianepca.com.

Certified Rural Health Clinics

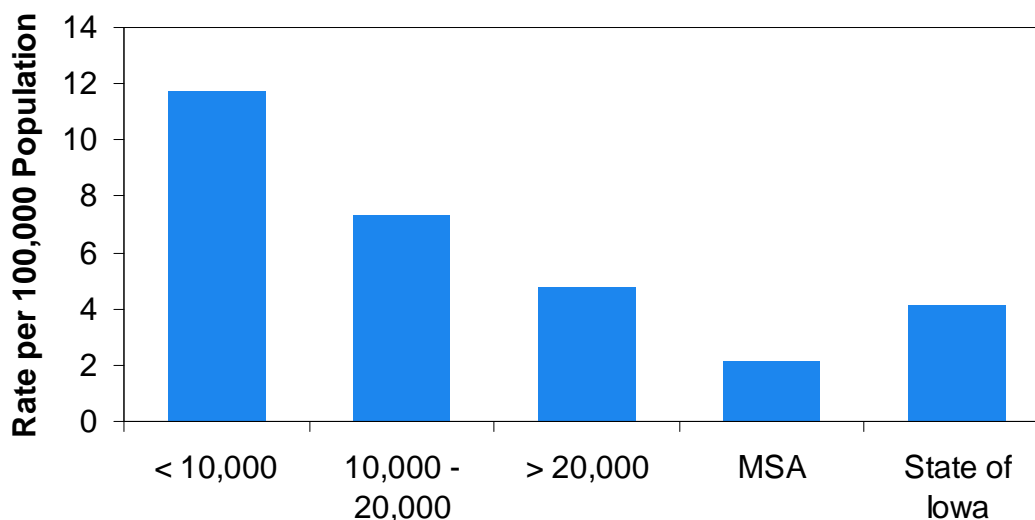
A rural health clinic is a clinic located in a rural area designated as a shortage area for personal health service and/or primary medical care manpower. In June of 2007, there were a total of 148 certified rural health clinics in Iowa (Iowa Department of Inspections and Appeals), located in 58 of our 99 counties. Such a clinic is neither a rehabilitation agency nor a facility primarily for the care and treatment of mental diseases. Patient services are furnished by a physician's assistant or nurse practitioner at least 50 percent of the time the clinic operates. The definition of such is found in Title 42 in the Code of Federal Regulations. Rural Health Clinics receive enhanced reimbursement for Medicare.

Hospitals

2007 Counts and Crude Rates per 100,000 (shaded)



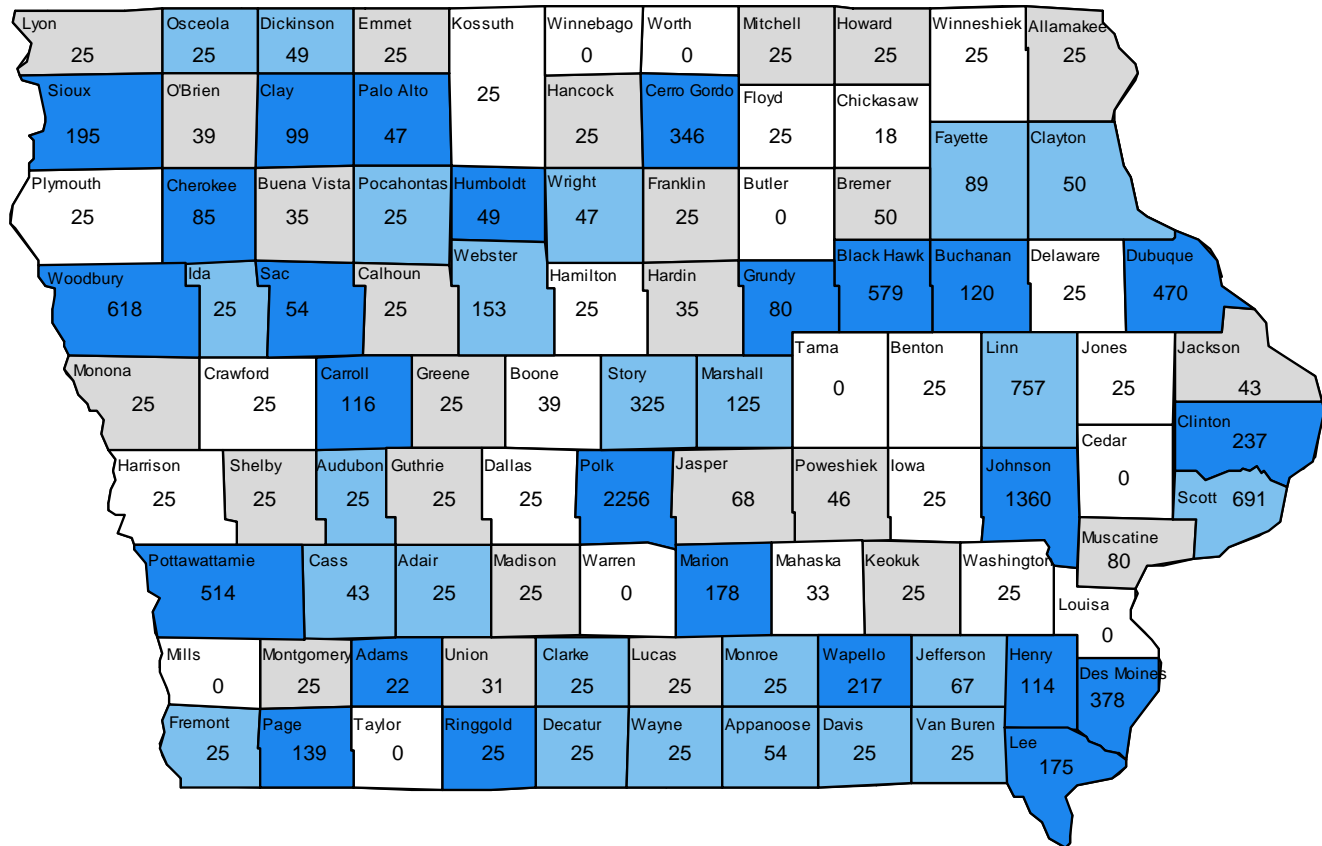
2007 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

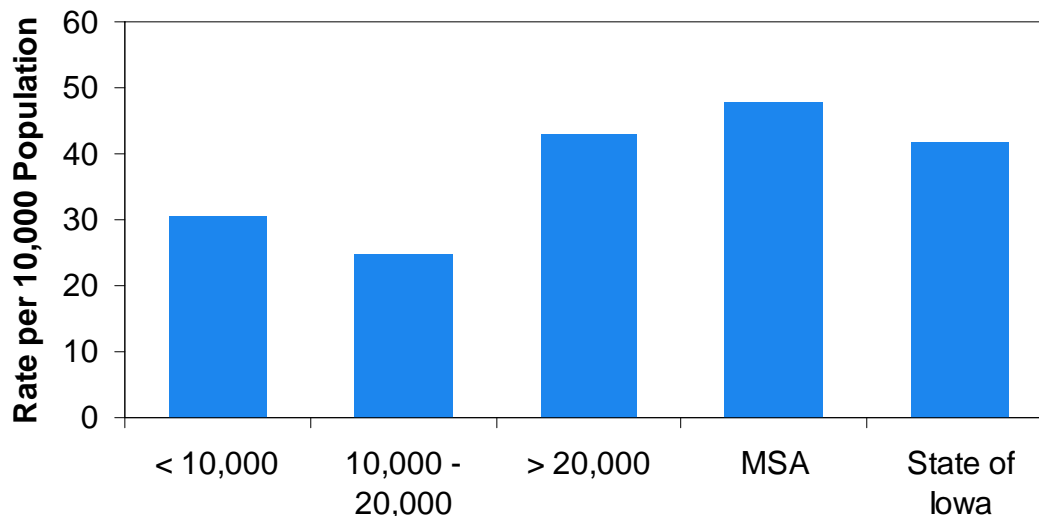
Hospital Beds

2007 Counts and Crude Rates per 10,000 (shaded)



□ 0 - 16 □ 16 - 27.1 □ 27.1 - 44.3 □ 44.3 - 115.3

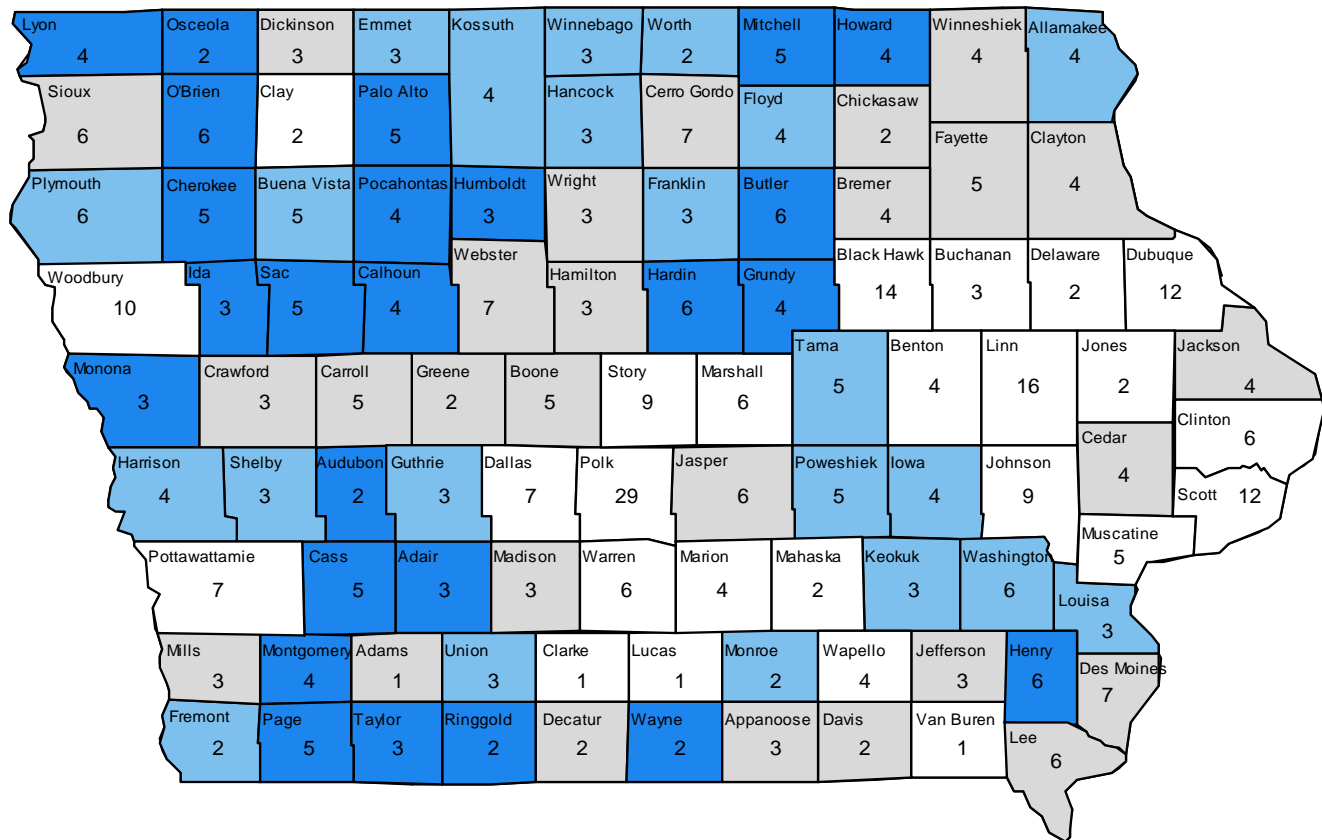
2007 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

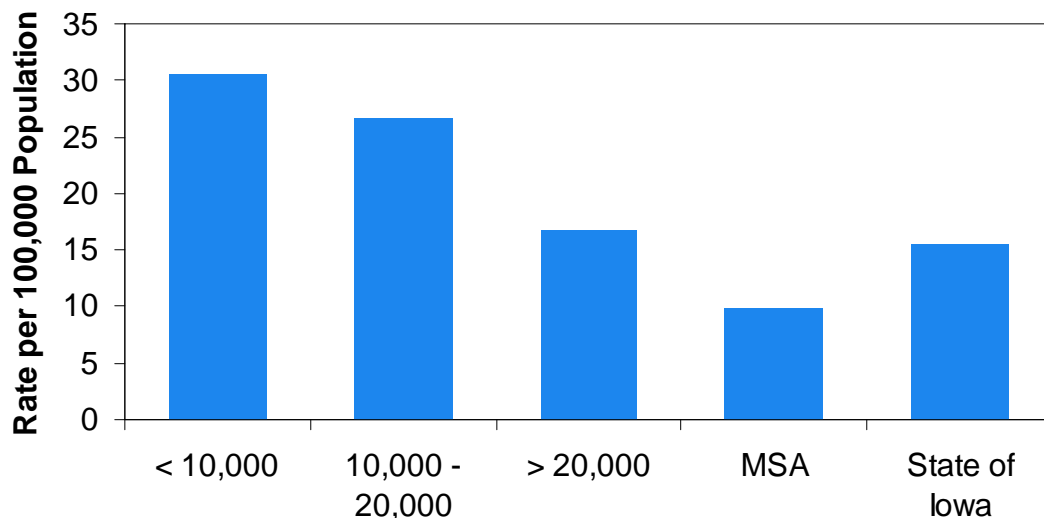
Nursing Facilities

2007 Counts and Crude Rates per 100,000 (shaded)



□ 7- 15.5 □ 15.5- 23.9 □ 23.9- 29.1 ■ 29.1- 52.4

2007 Crude Rates by County Group



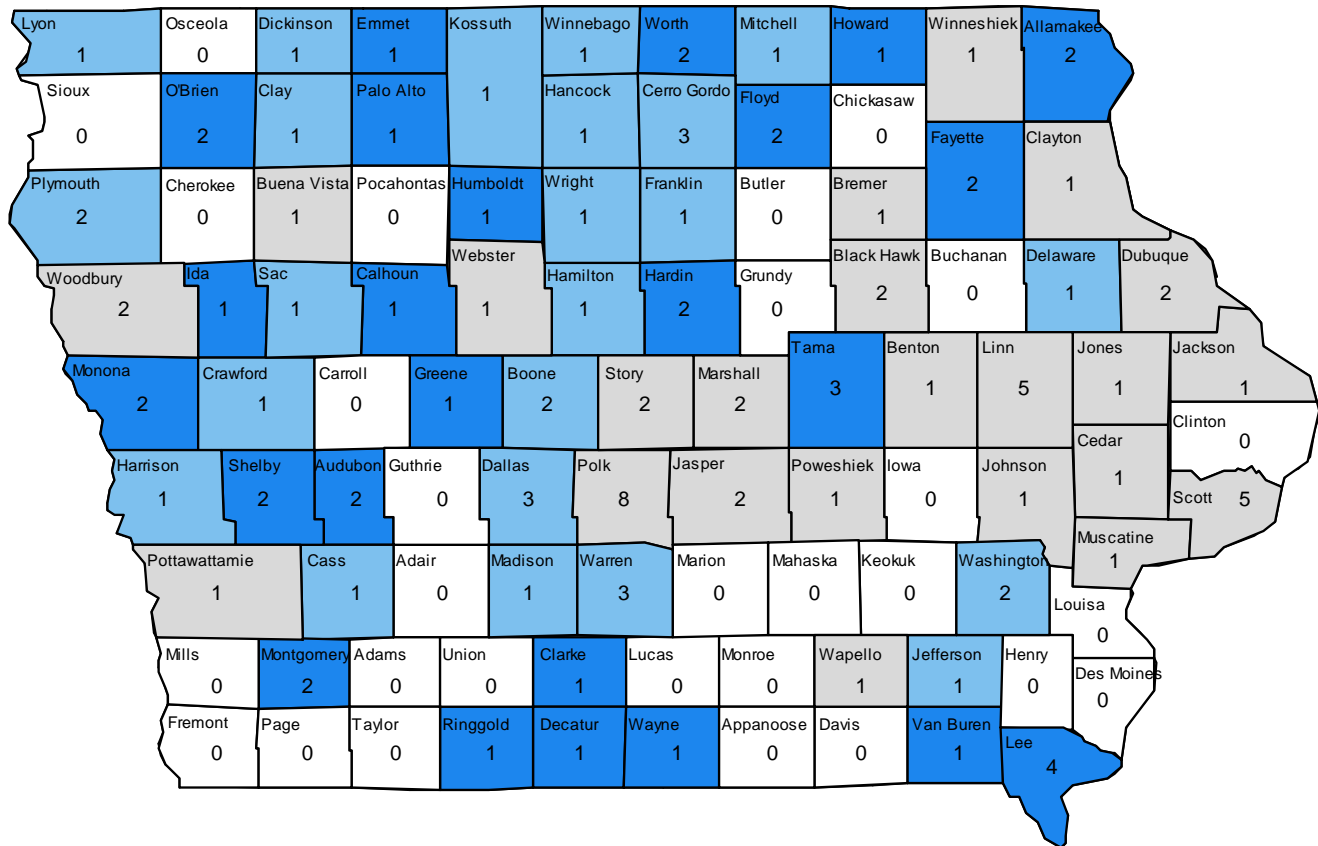
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Lyon 183	Osceola 113	Dickinson 227	Emmet 220	Kossuth 226	Winnebago 198	Worth 134	Mitchell 252	Howard 209	Winneshiek 251	Allamakee 269	
Sioux 325	O'Brien 320	Clay 213	Palo Alto 227		Hancock 175	Cerro Gordo 595	Floyd 266	Chickasaw 155	Fayette 324	Clayton 246	
Plymouth 341	Cherokee 231	Buena Vista 318	Pocahontas 179	Humboldt 178	Wright 223	Franklin 175	Butler 291	Bremer 284	Buchanan 196	Delaware 171	Dubuque 985
Woodbury 854	Iowa 175	Sac 264	Calhoun 221	Webster 613	Hamilton 238	Hardin 399	Grundy 183	Black Hawk 1273			
Monona 277	Crawford 217	Carroll 372	Greene 153	Boone 397	Story 613	Marshall 1072	Tama 313	Benton 234	Linn 1344	Jones 191	Jackson 232
Harrison 310	Shelby 220	Audubon 141	Guthrie 203	Dallas 405	Polk 2299	Jasper 334	Poweshiek 322	Iowa 229	Johnson 594	Cedar 240	Clinton 592
Pottawattamie 658	Cass 246	Adair 177	Madison 209	Warren 521	Marion 354	Mahaska 155	Keokuk 172	Washington 372	Muscatine 428	Scott 1235	
Mills 158	Montgomery 263	Adams 54	Union 157	Clarke 94	Lucas 119	Monroe 150	Wapello 377	Jefferson 189	Henry 299	Louisa 167	Des Moines 454
Fremont 144	Page 322	Taylor 144	Ringgold 150	Decatur 127	Wayne 116	Appanoose 183	Davis 123	Van Buren 75	Lee 474		



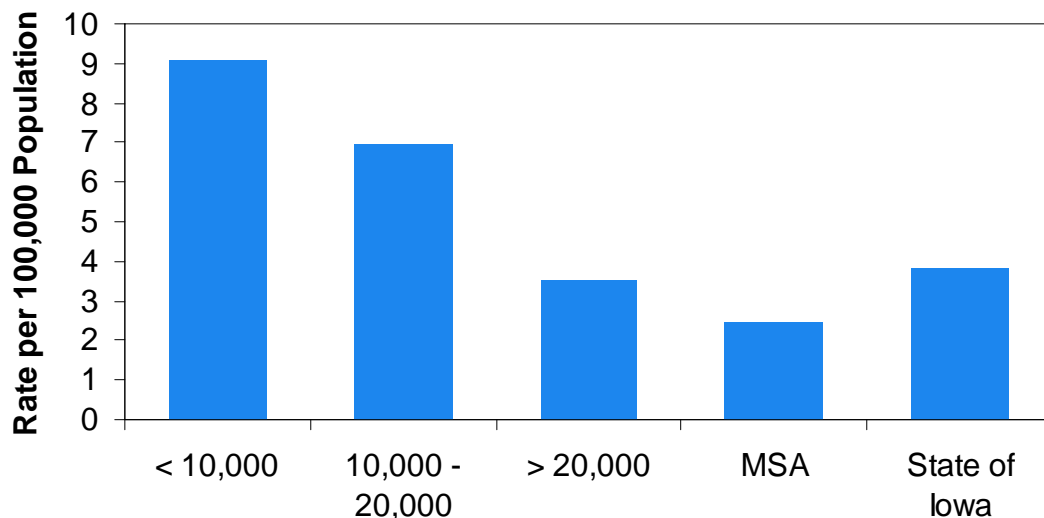
Chronic Confusion or Dementing Illness Units

2007 Counts and Crude Rates per 100,000 (shaded)



0 0.8- 5.5 5.5- 9.5 9.5- 31.9

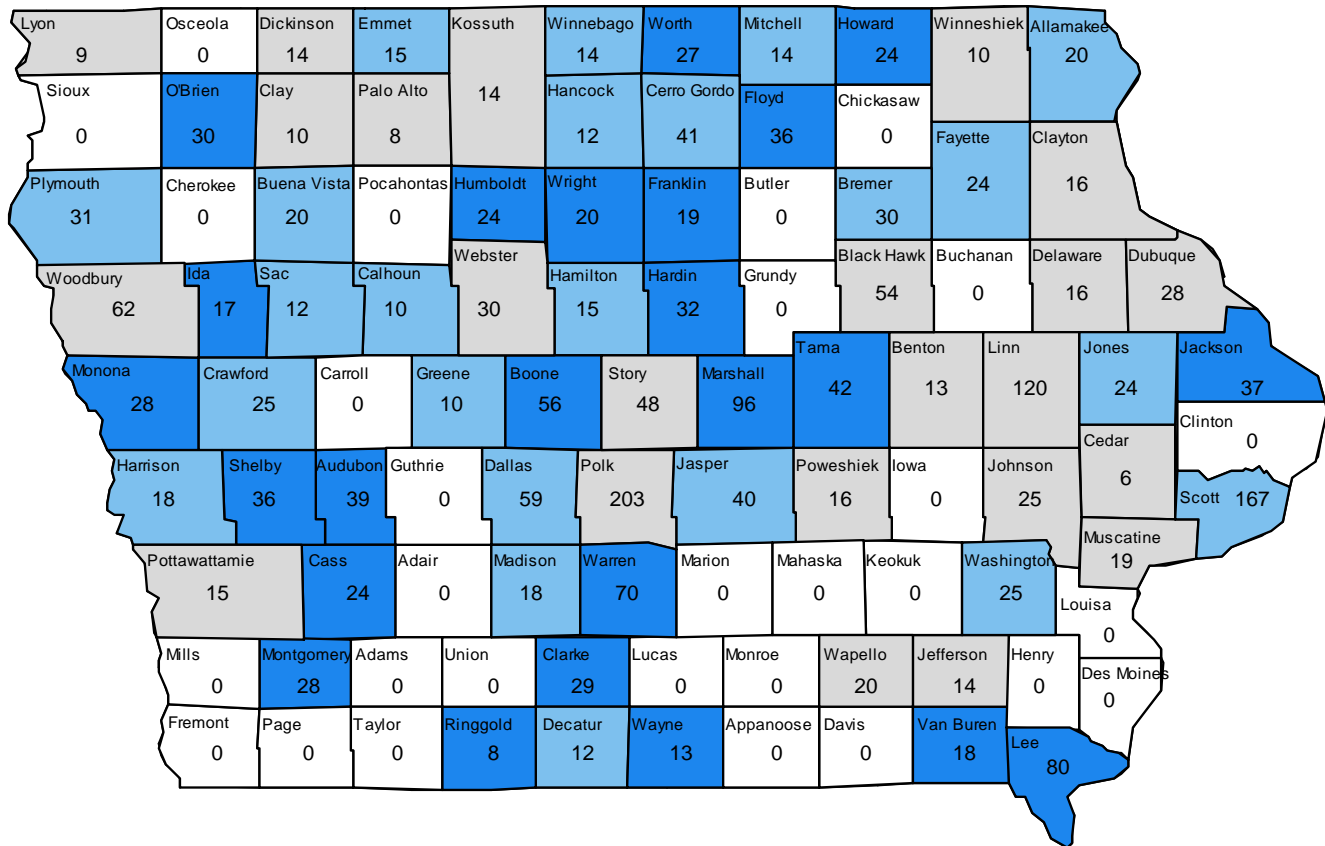
2007 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

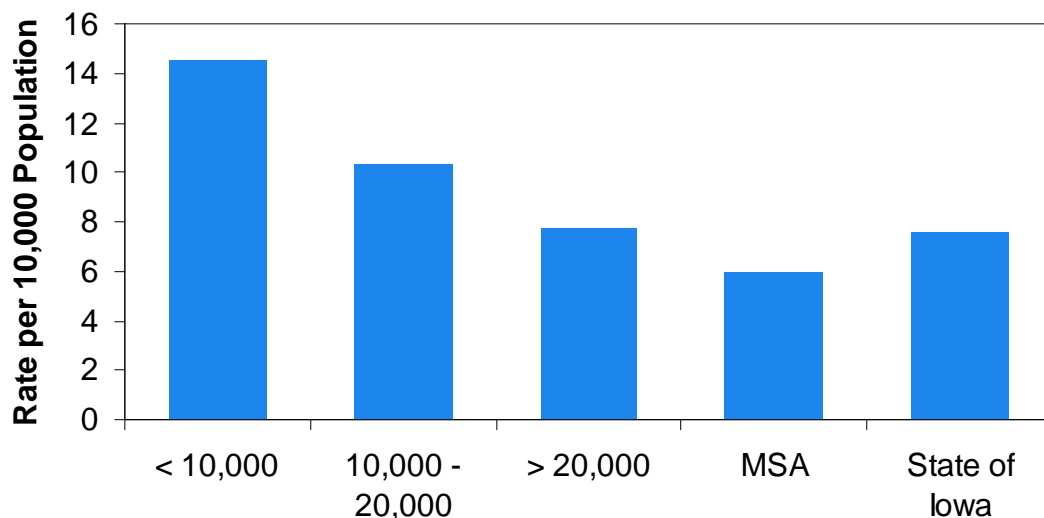
Beds in Chronic Confusion or Dementing Illness Units

2007 Counts and Crude Rates per 10,000 (shaded)



0 1.6- 9.2 9.2- 14.9 14.9- 62.2

2007 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

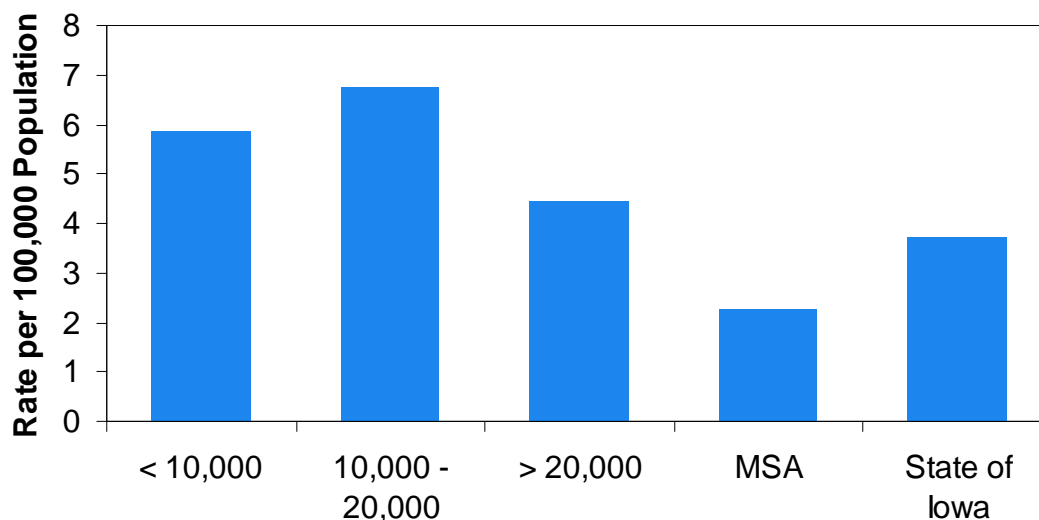
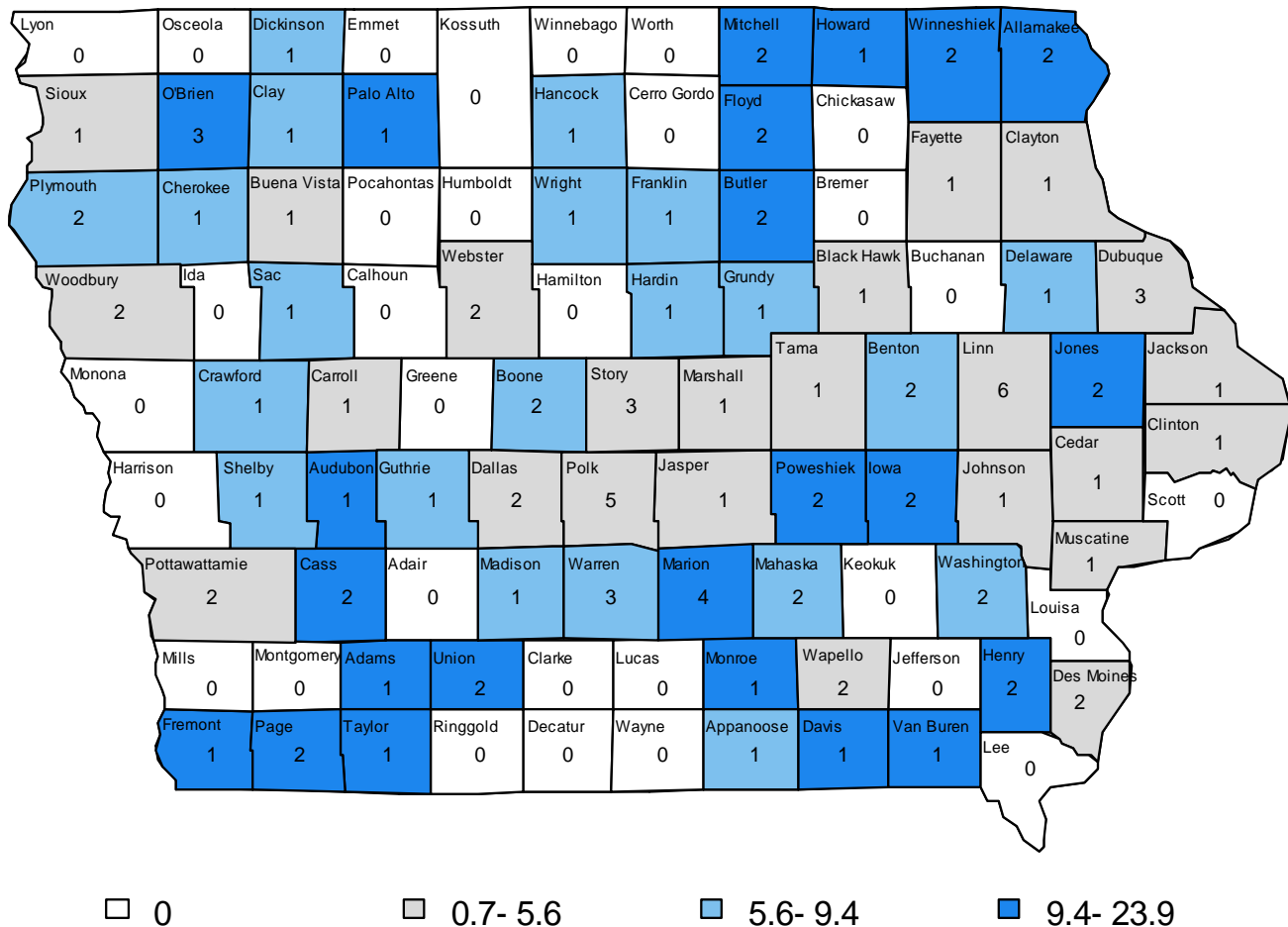
[illegible]

Category	Rate per 100,000 Population
< 10,000	3.2
10,000 - 20,000	5.1
> 20,000	2.5
MSA	5.7
State of Iowa	4.8

181

Lyon 0	Osceola 0	Dickinson 0	Emmet 0	Kossuth 39	Winnebago 44	Worth 0	Mitchell 0	Howard 0	Winneshiek 0	Allamakee 0
Sioux 12	O'Brien 60	Clay 0	Palo Alto 16	Hancock 0	Cerro Gordo 42	Floyd 56	Chickasaw 0	Fayette 0	Clayton 36	
Plymouth 0	Cherokee 0	Buena Vista 32	Pocahontas 0	Humboldt 0	Webster 30	Wright 24	Franklin 0	Butler 0	Bremer 0	Black Hawk 138
Woodbury 144	Ida 0	Sac 0	Calhoun 68	Hamilton 0	Hardin 0	Grundy 0	Buchanan 0	Delaware 0	Dubuque 98	
Monona 0	Crawford 12	Carroll 49	Greene 0	Boone 639	Story 24	Marshall 0	Tama 0	Benton 0	Linn 82	Jones 0
Harrison 6	Shelby 0	Audubon 0	Guthrie 0	Dallas 0	Polk 220	Jasper 24	Poweshiek 0	Iowa 0	Johnson 8	Cedar 0
Pottawattamie 24	Cass 0	Adair 0	Madison 0	Warren 16	Marion 23	Mahaska 8	Keokuk 0	Washington 16	Muscatine 0	Clinton 25
Mills 991	Montgomery 0	Adams 12	Union 18	Clarke 14	Lucas 0	Monroe 0	Wapello 0	Jefferson 0	Henry 0	Scott 54
Fremont 0	Page 0	Taylor 0	Ringgold 0	Decatur 0	Wayne 0	Appanoose 0	Davis 0	Van Buren 0	Lee 0	Des Moines 16

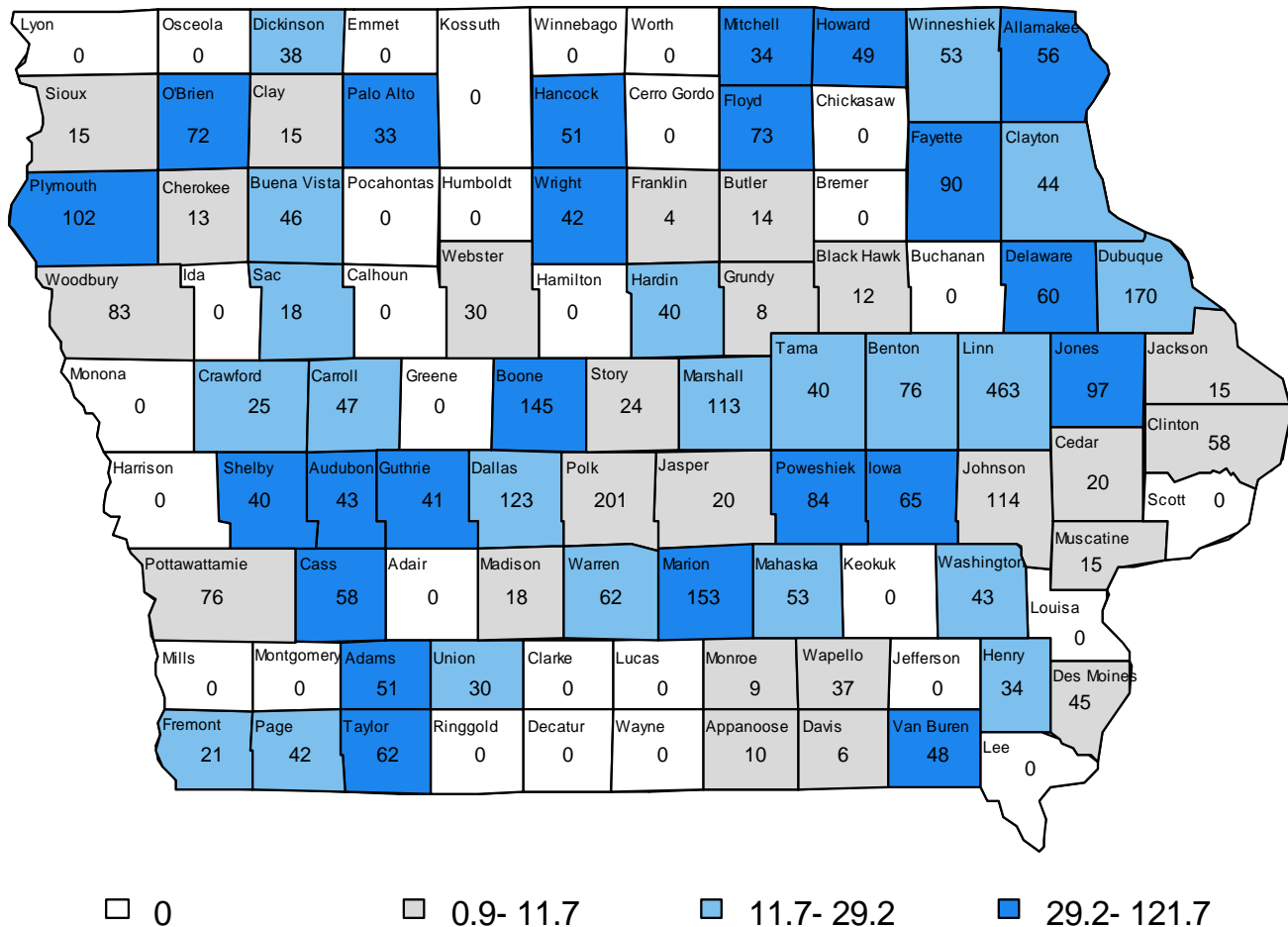




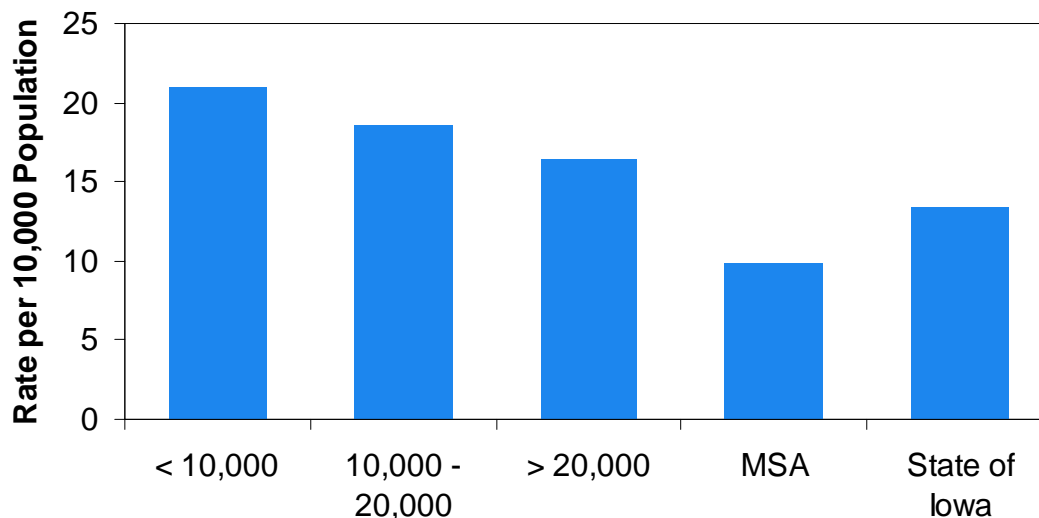
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Beds in Residential Care Facilities

2007 Counts and Crude Rates per 10,000 (shaded)



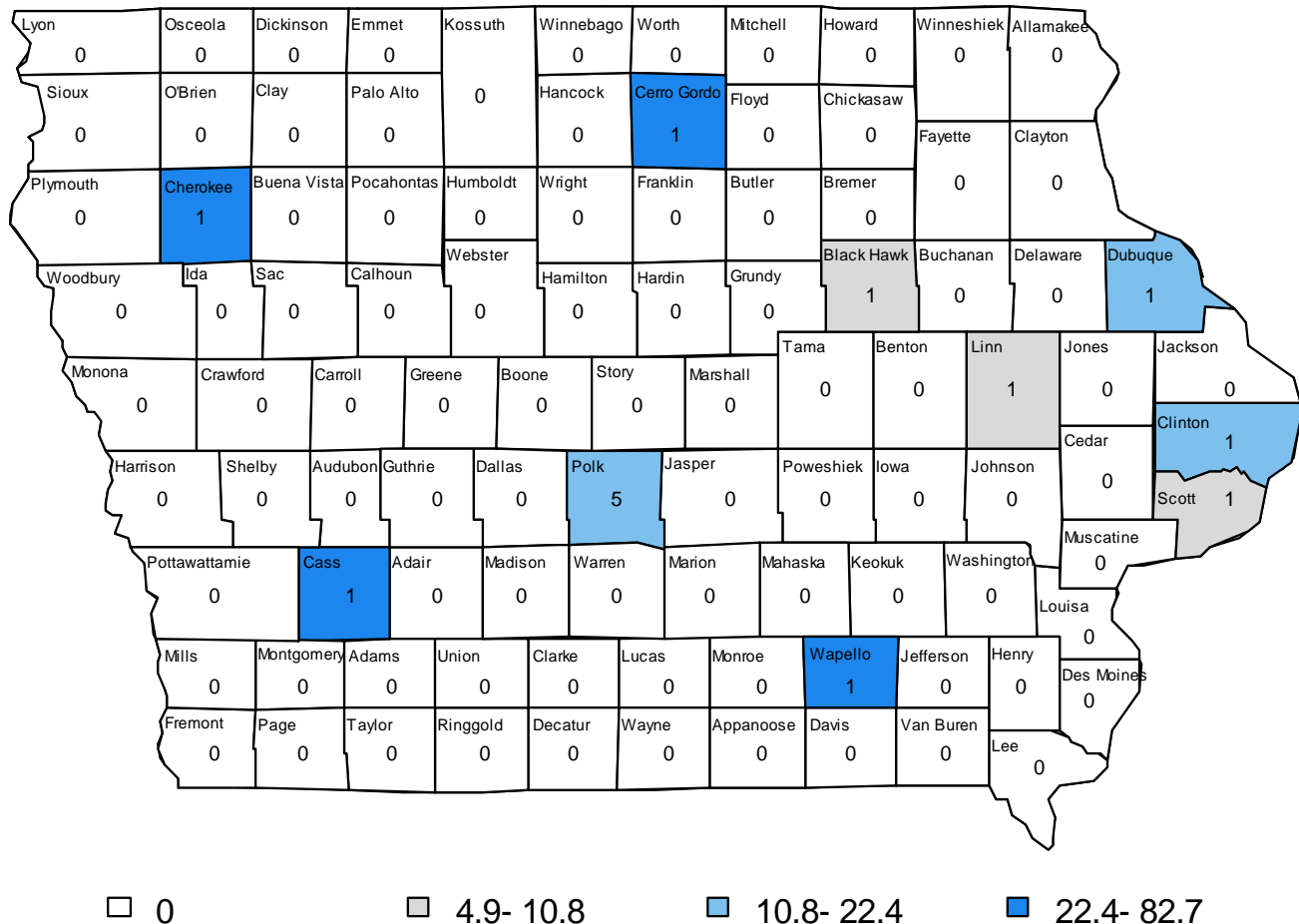
2007 Crude Rates by County Group



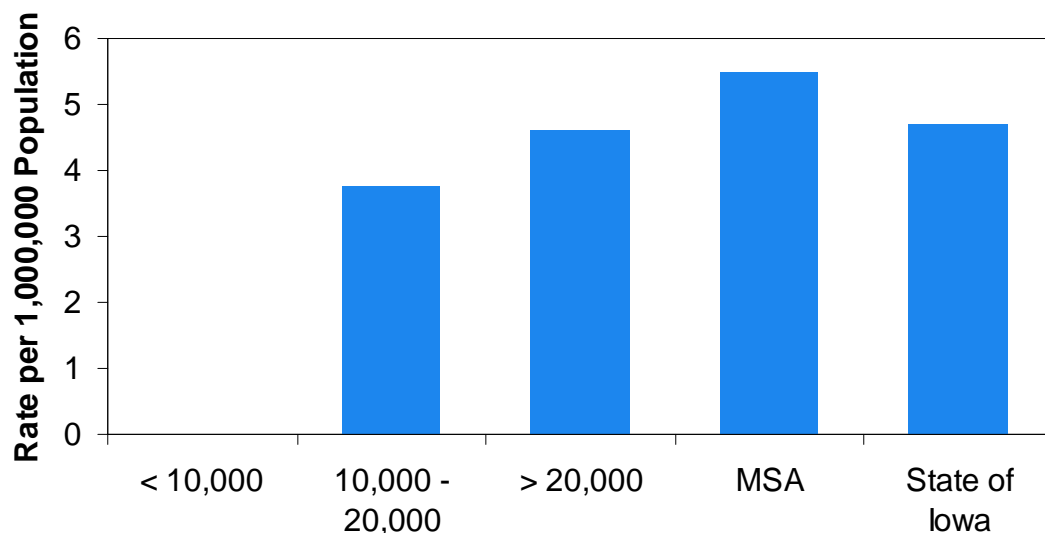
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Residential Care Facilities for Persons with Mental Illness

2007 Counts and Crude Rates per 1,000,000 (shaded)



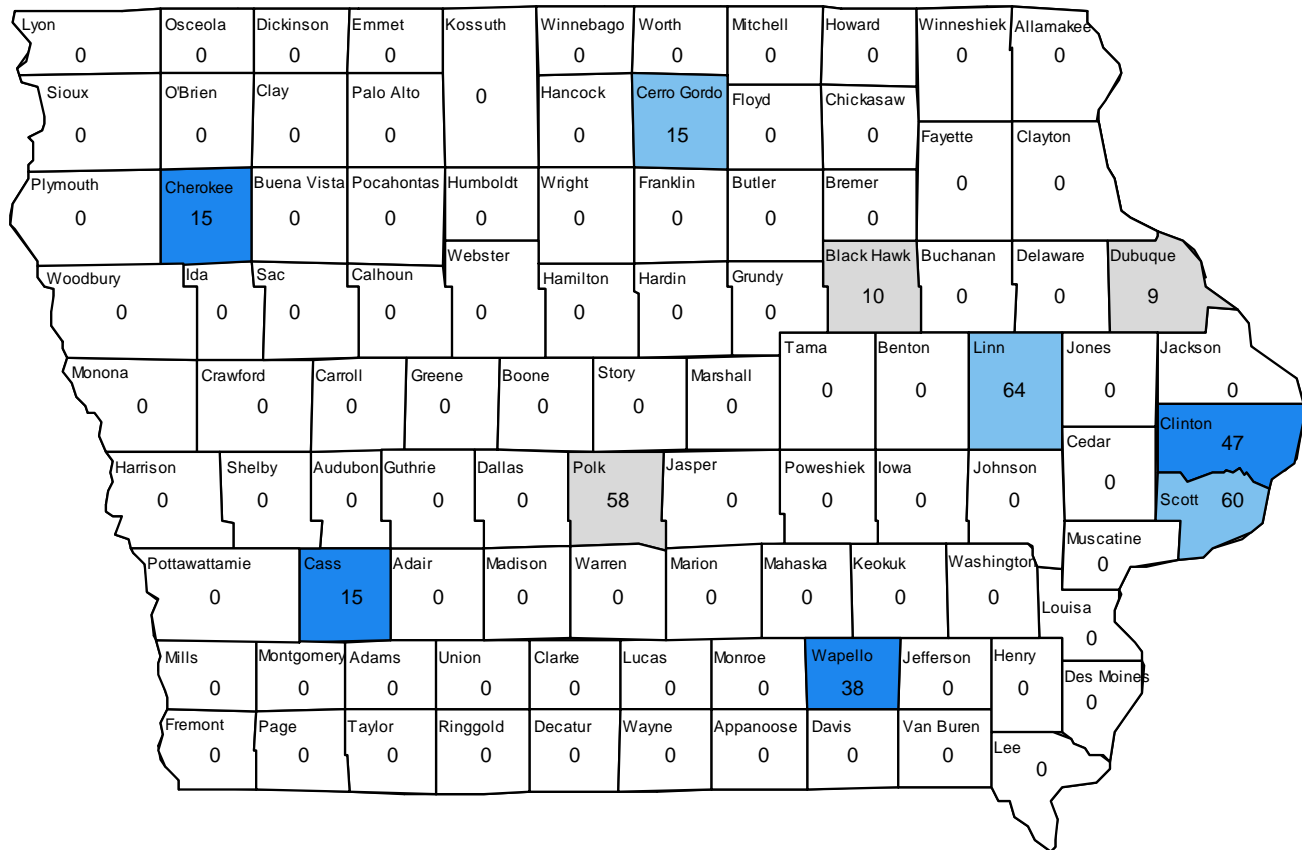
2007 Crude Rates by County Group



Source: Department of Inspections and Appeals, Iowa Department of Public Health

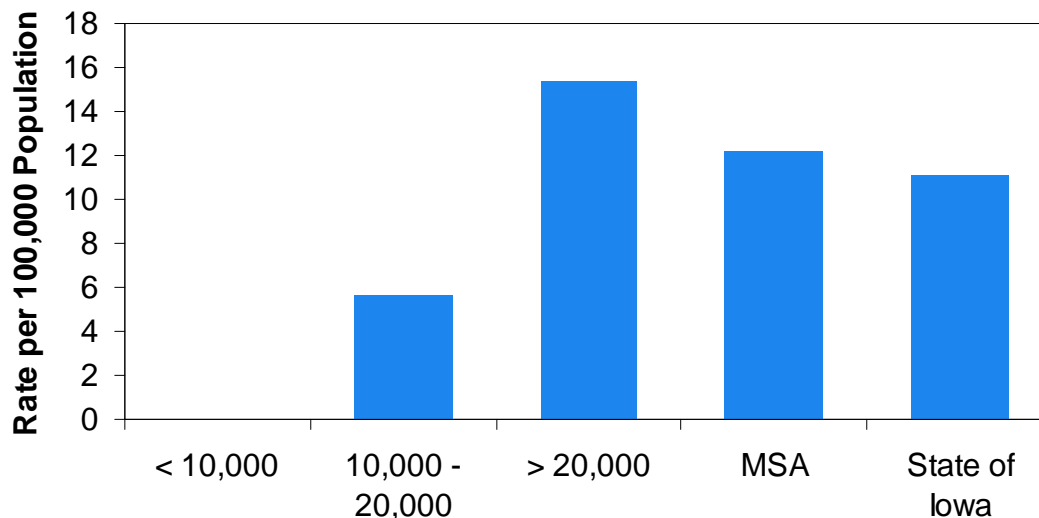
Beds in Residential Care Facilities for Persons with Mental Illness

2007 Counts and Crude Rates per 100,000 (shaded)



0 7.9- 31.2 31.2- 91 91- 124.1

2007 Crude Rates by County Group

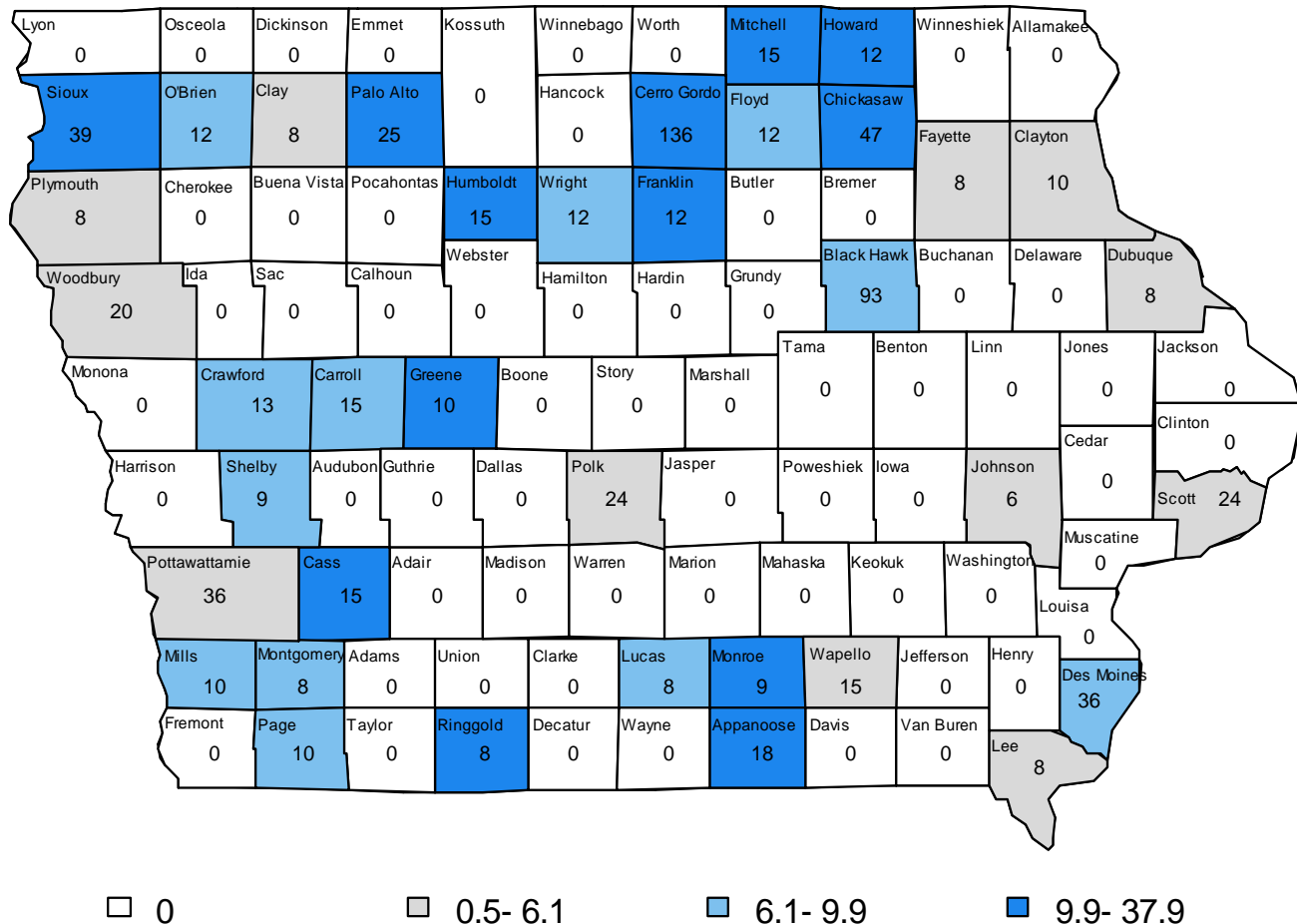


Source: Department of Inspections and Appeals, Iowa Department of Public Health

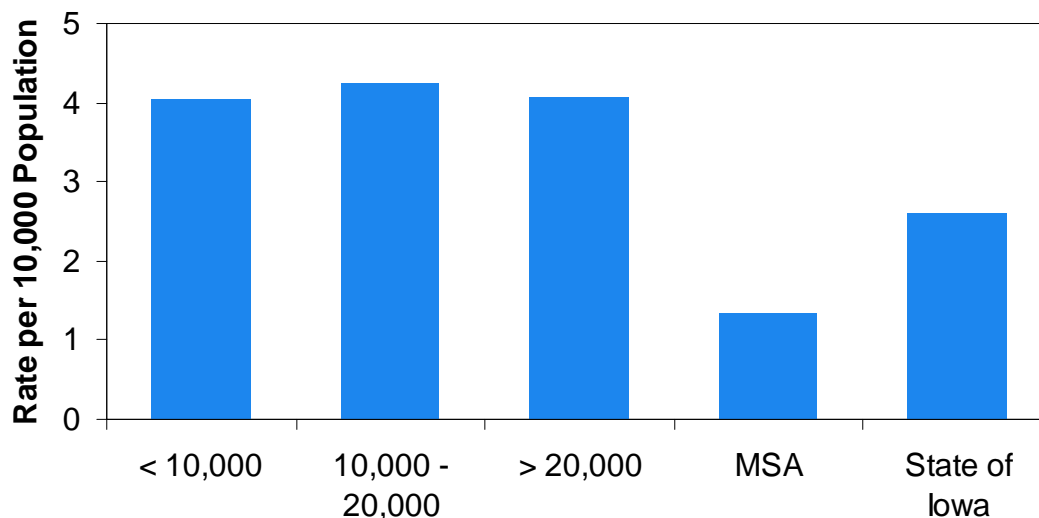
[illegible]

Beds in Residential Care Facilities for the Mentally Retarded

2007 Counts and Crude Rates per 10,000 (shaded)



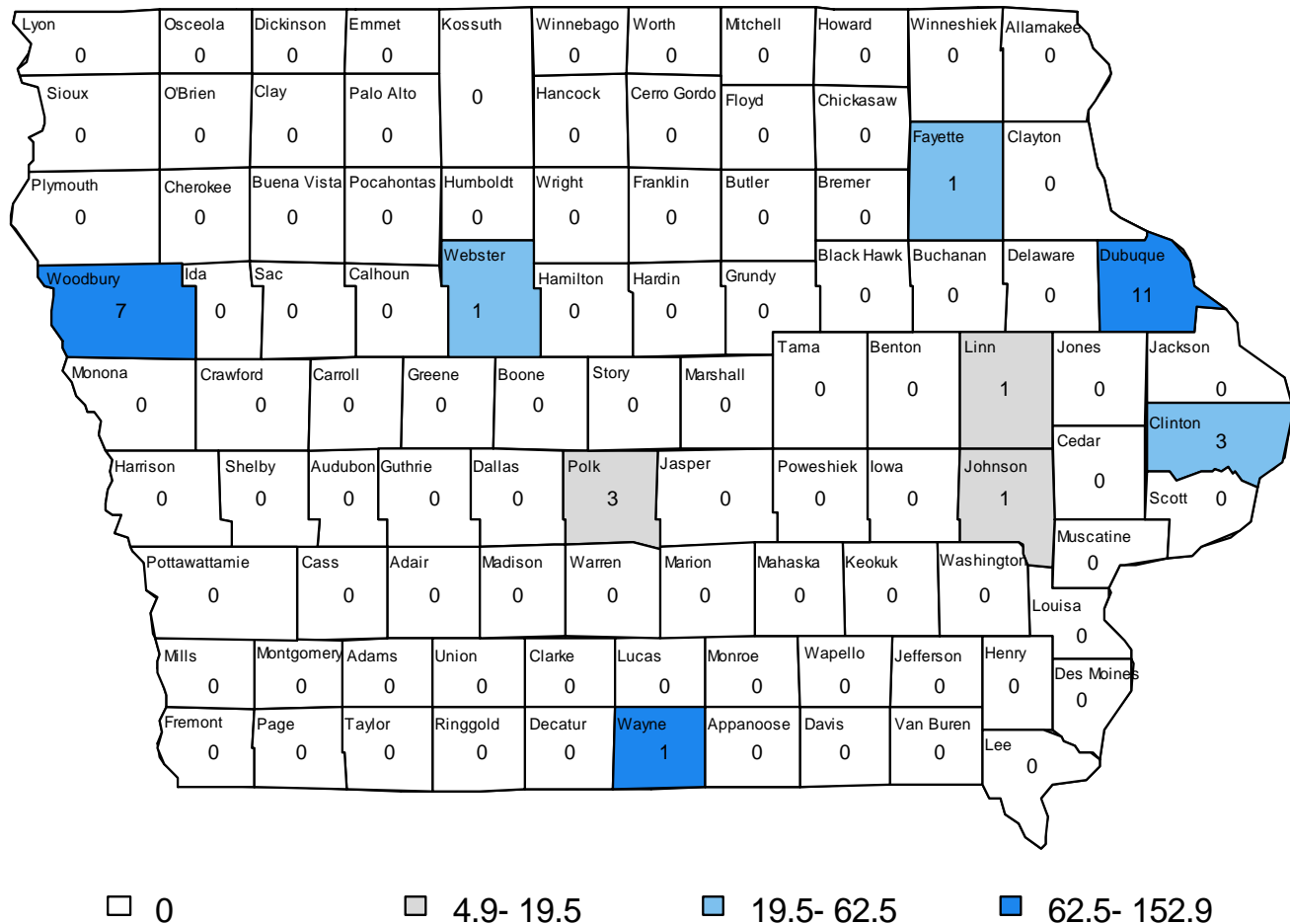
2007 Crude Rates by County Group



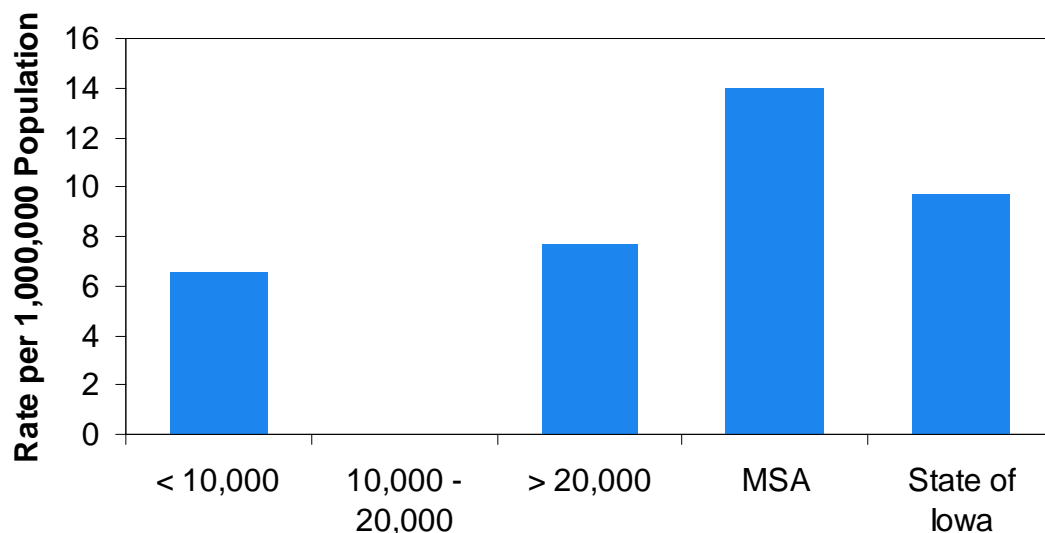
Source: Department of Inspections and Appeals, Iowa Department of Public Health

3-5 Bed Units for the Mentally Retarded

2007 Counts and Crude Rates per 1,000,000 (shaded)



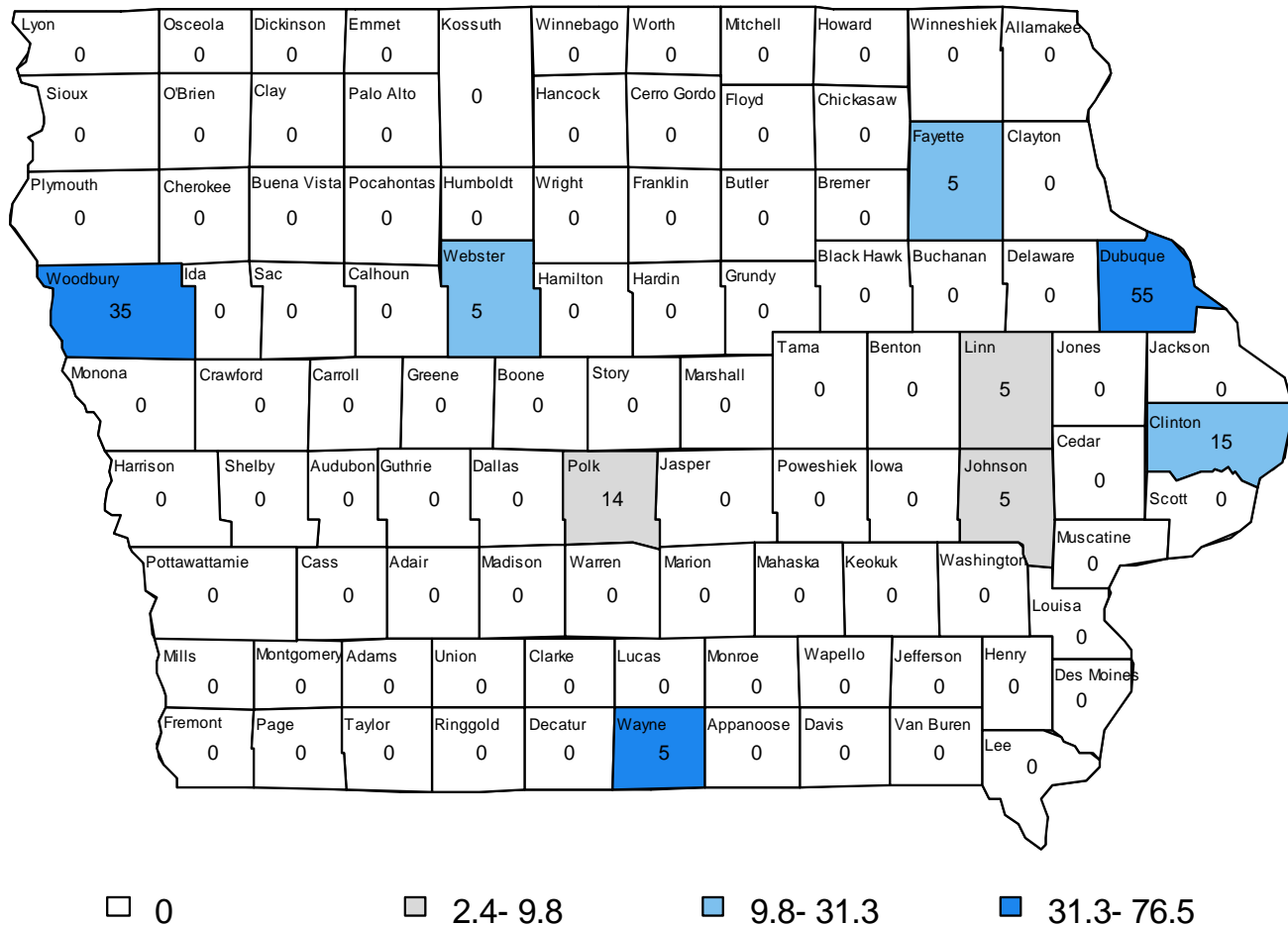
2007 Crude Rates by County Group



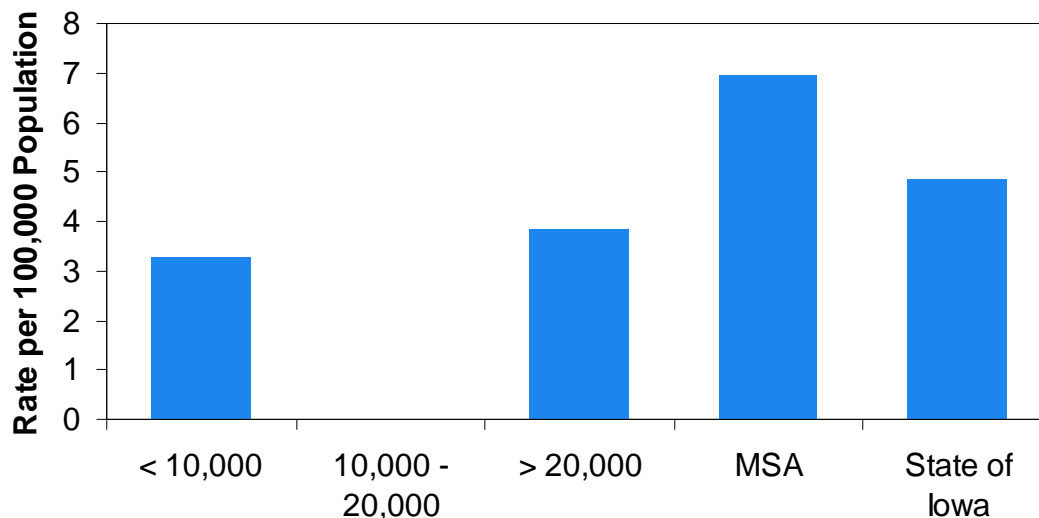
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Beds in 3-5 Bed Units for the Mentally Retarded

2007 Counts and Crude Rates per 100,000 (shaded)



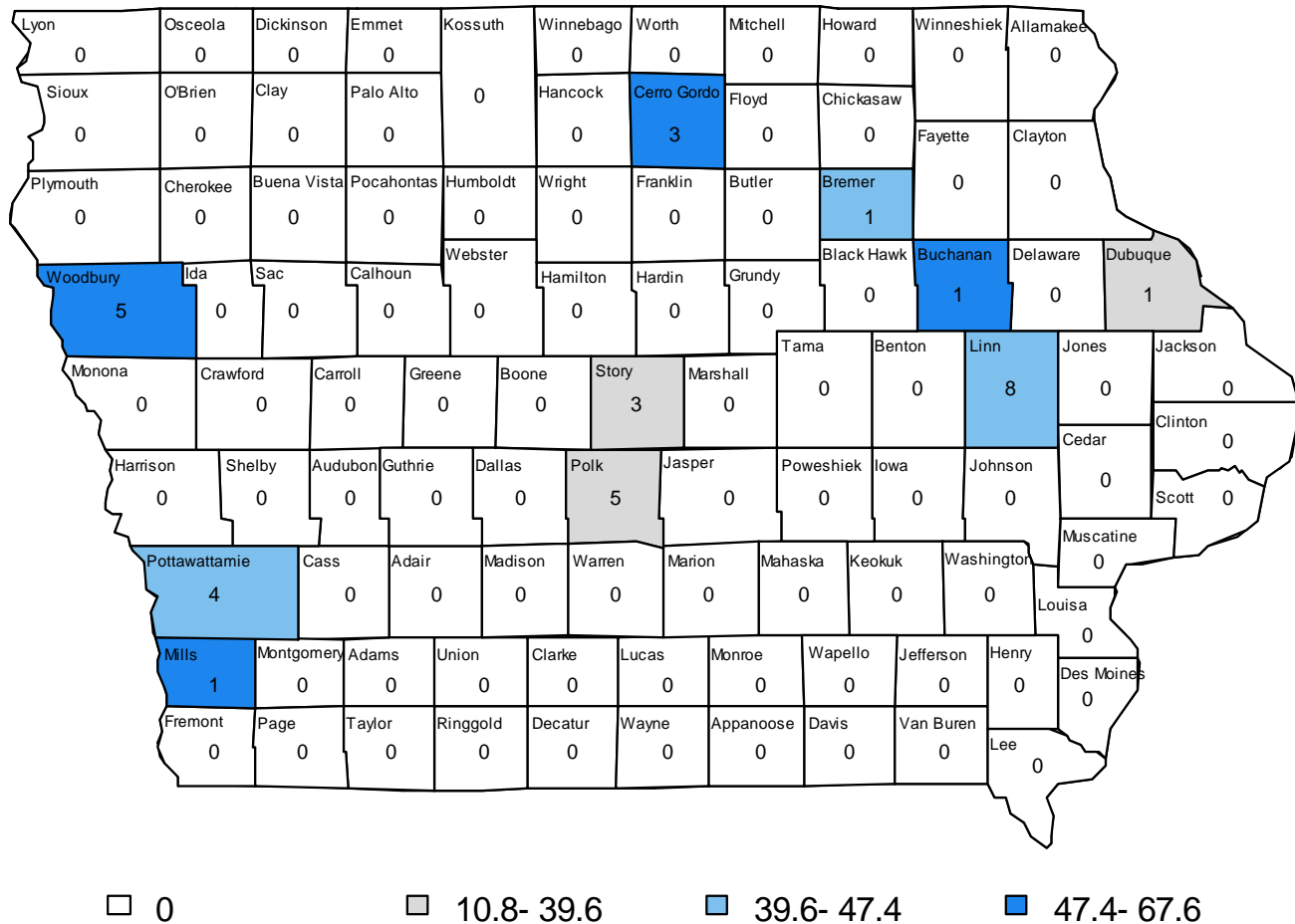
2007 Crude Rates by County Group



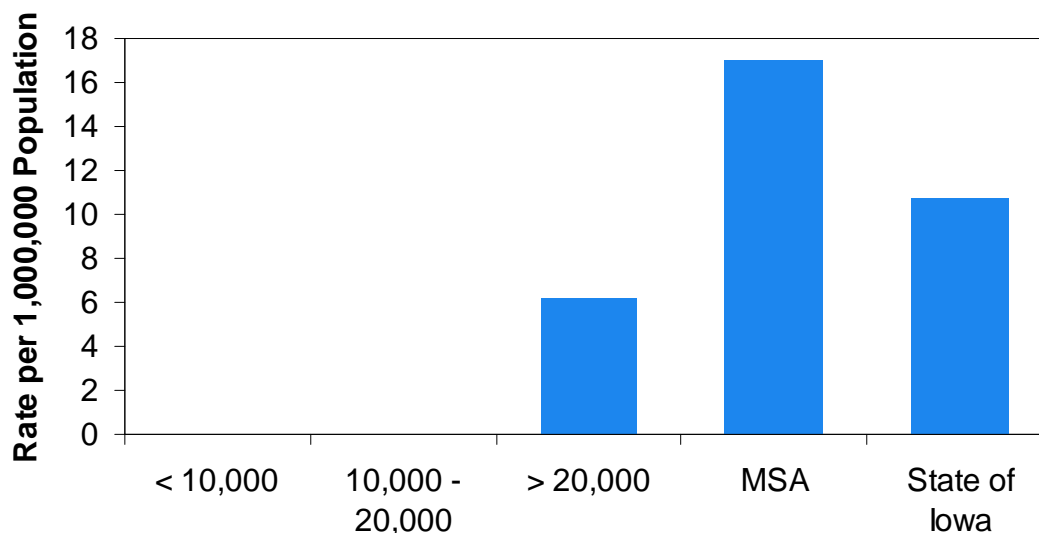
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Psychiatric Medical Institutions for Children

2007 Counts and Crude Rates per 1,000,000 (shaded)



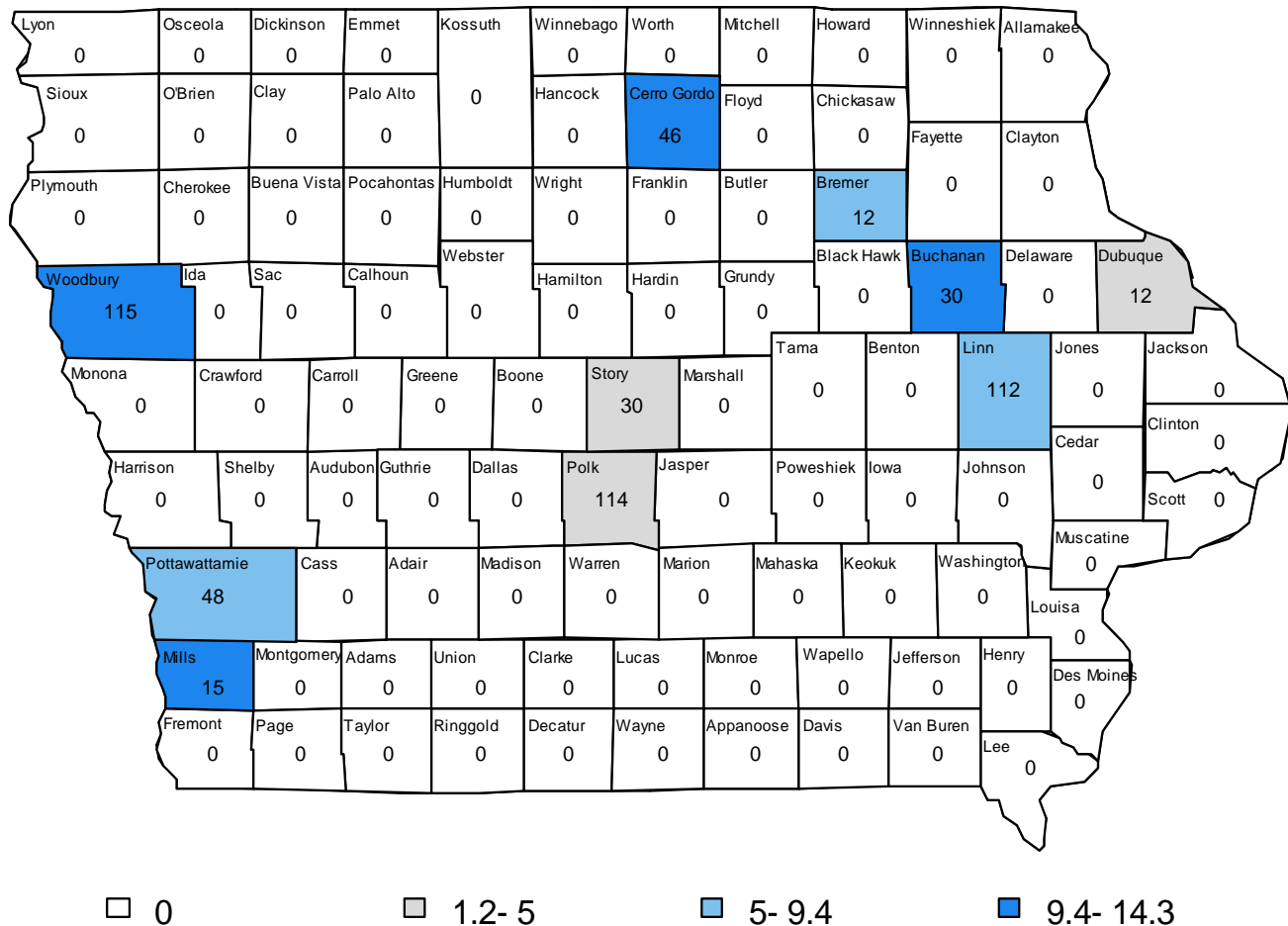
2007 Crude Rates by County Group



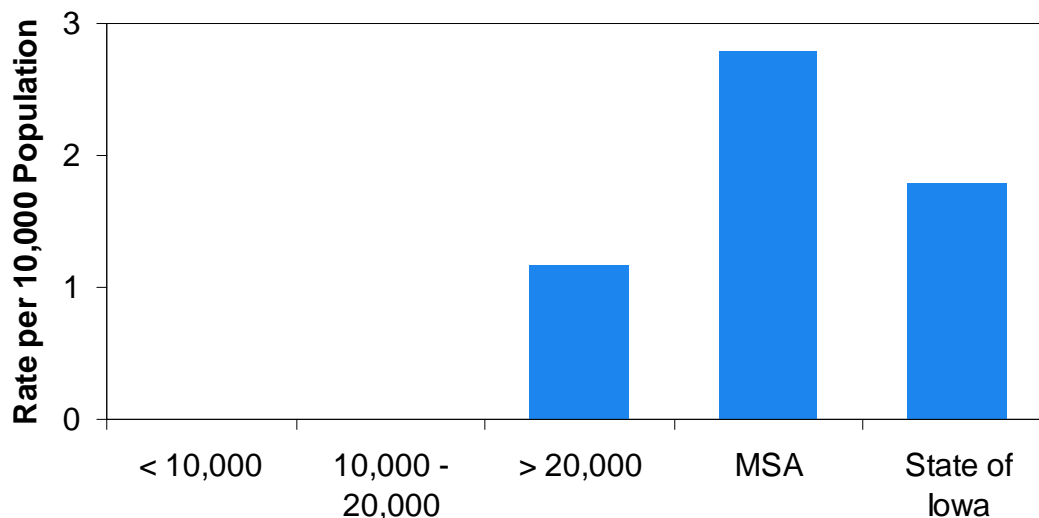
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Beds in Psychiatric Medical Institutions for Children

2007 Counts and Crude Rates per 10,000 (shaded)



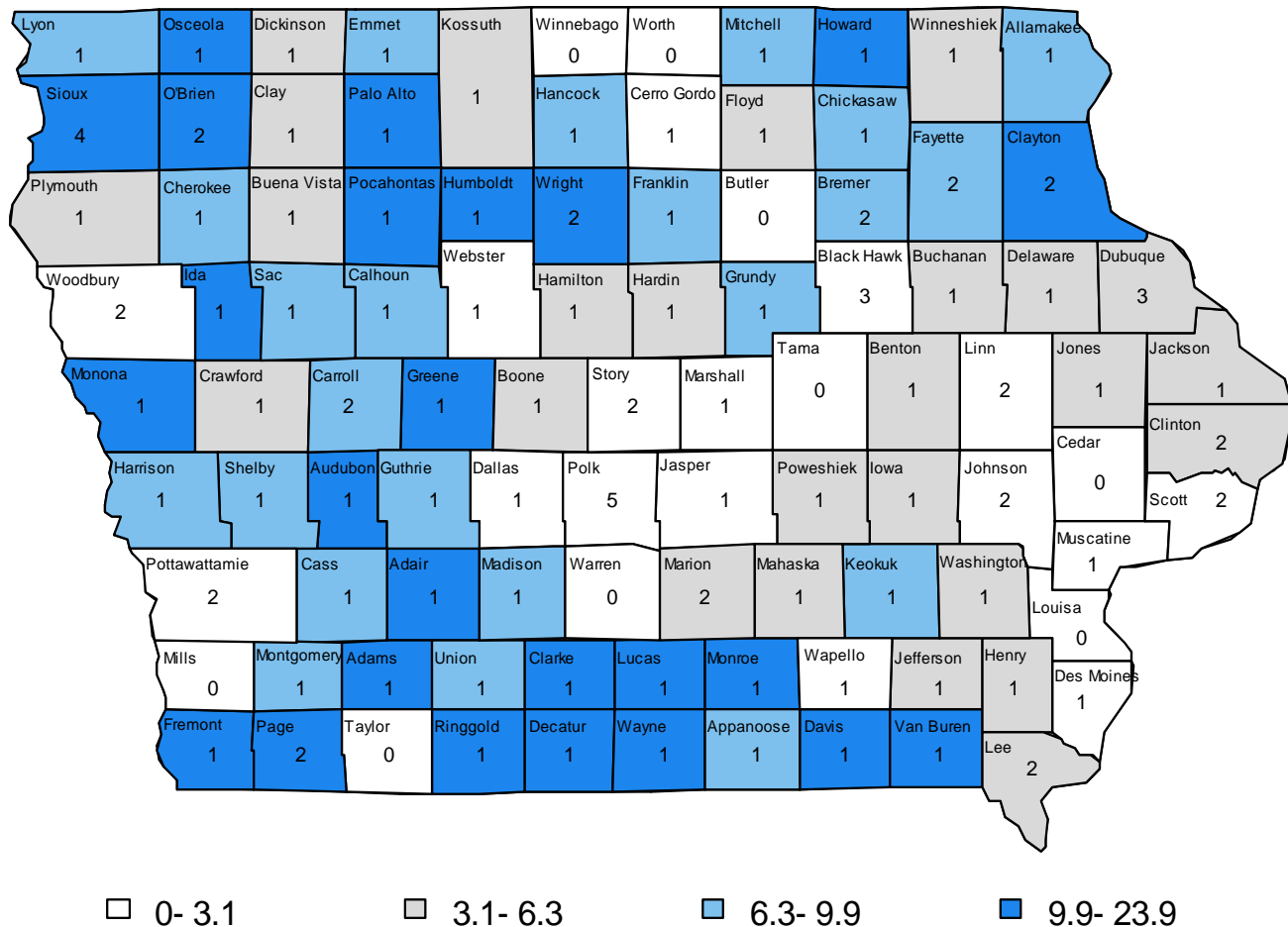
2007 Crude Rates by County Group



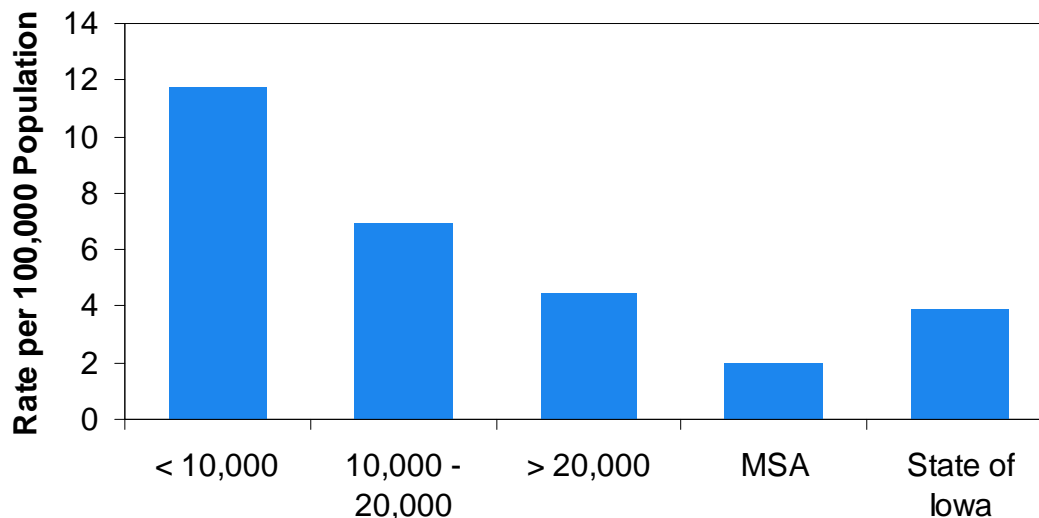
Source: Department of Inspections and Appeals, Iowa Department of Public Health

Total Trauma Care Facilities

2007 Counts and Crude Rates per 100,000 (shaded)



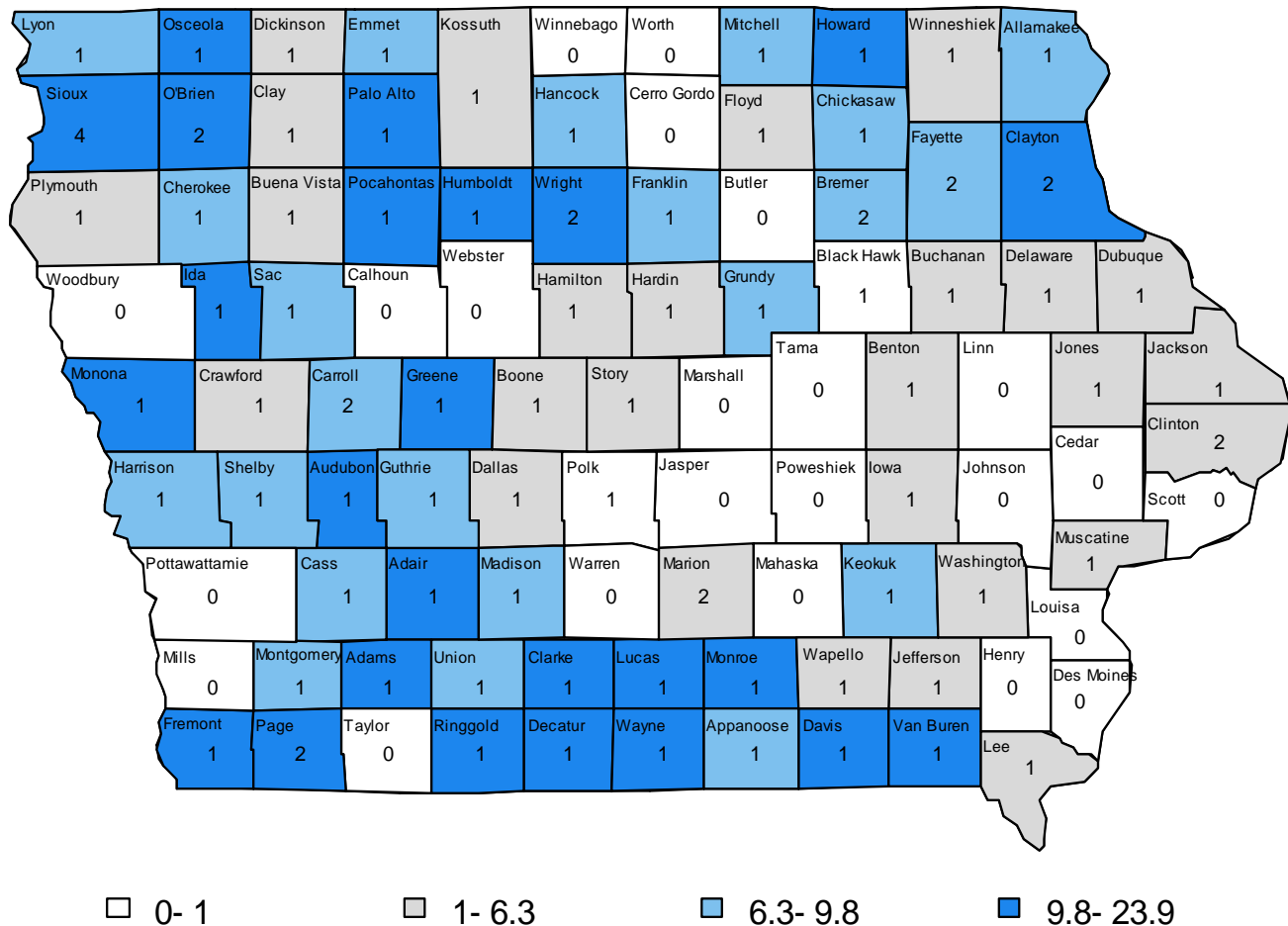
2007 Crude Rates by County Group



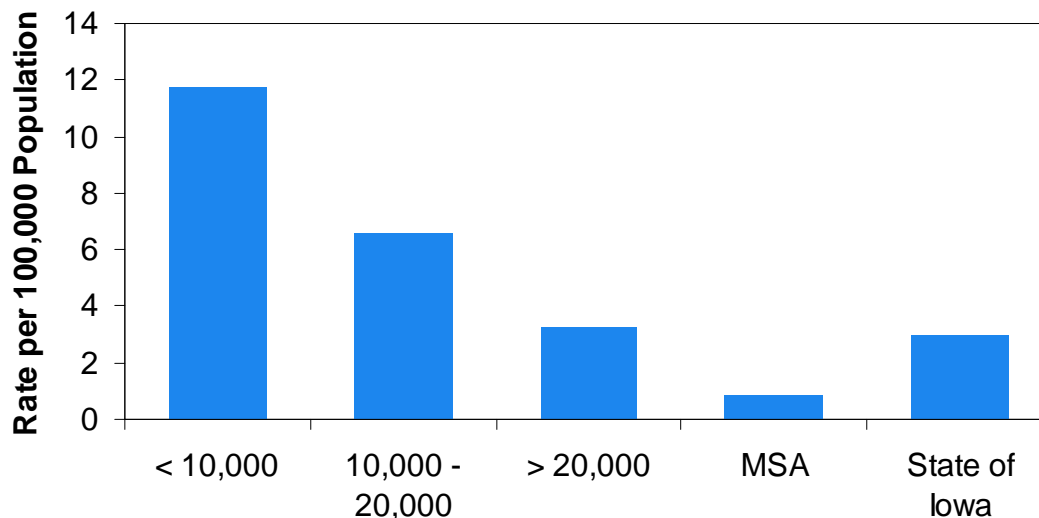
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Community Trauma Care Facilities

2007 Counts and Crude Rates per 100,000 (shaded)



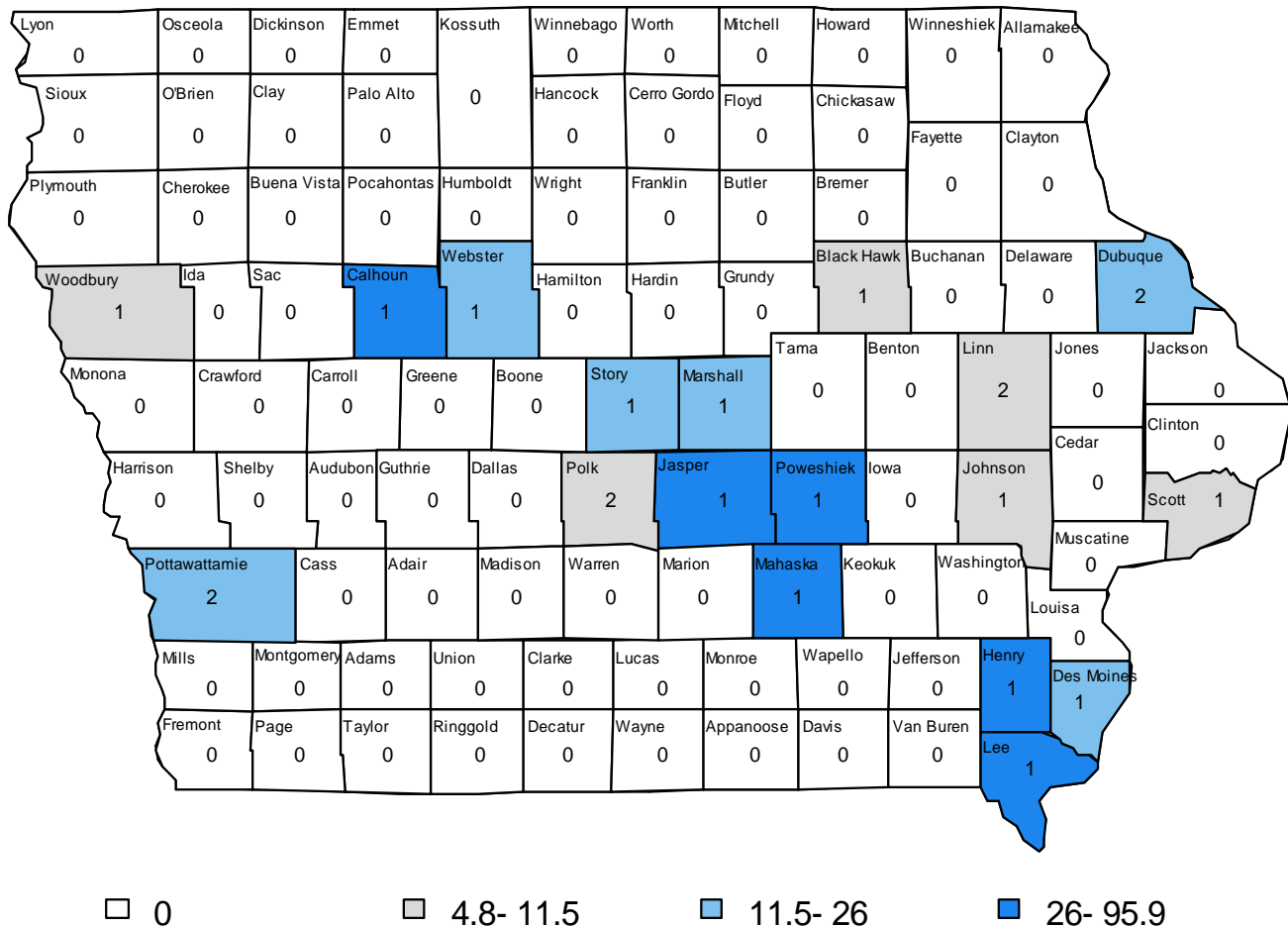
2007 Crude Rates by County Group



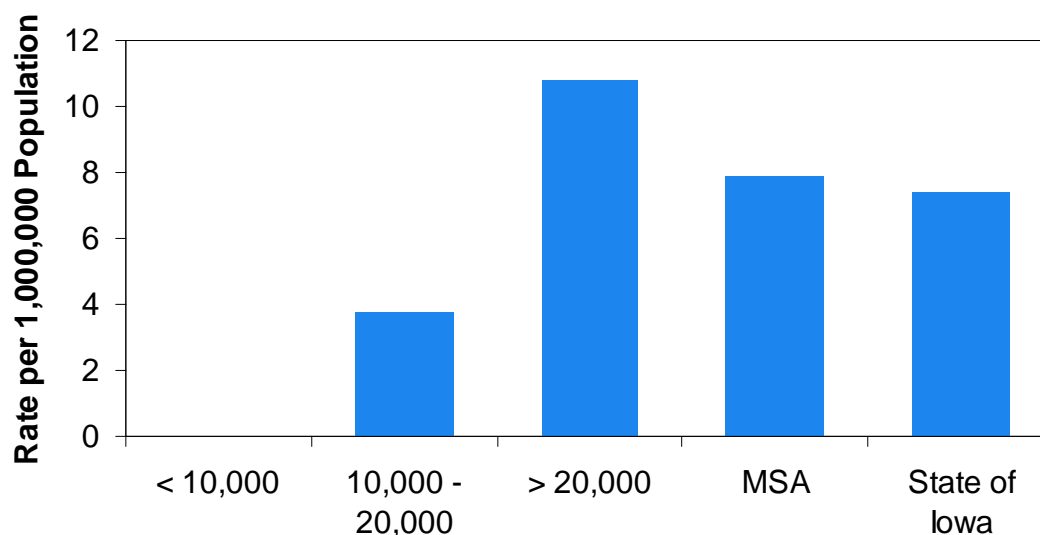
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Area Trauma Care Facilities

2007 Counts and Crude Rates per 1,000,000 (shaded)



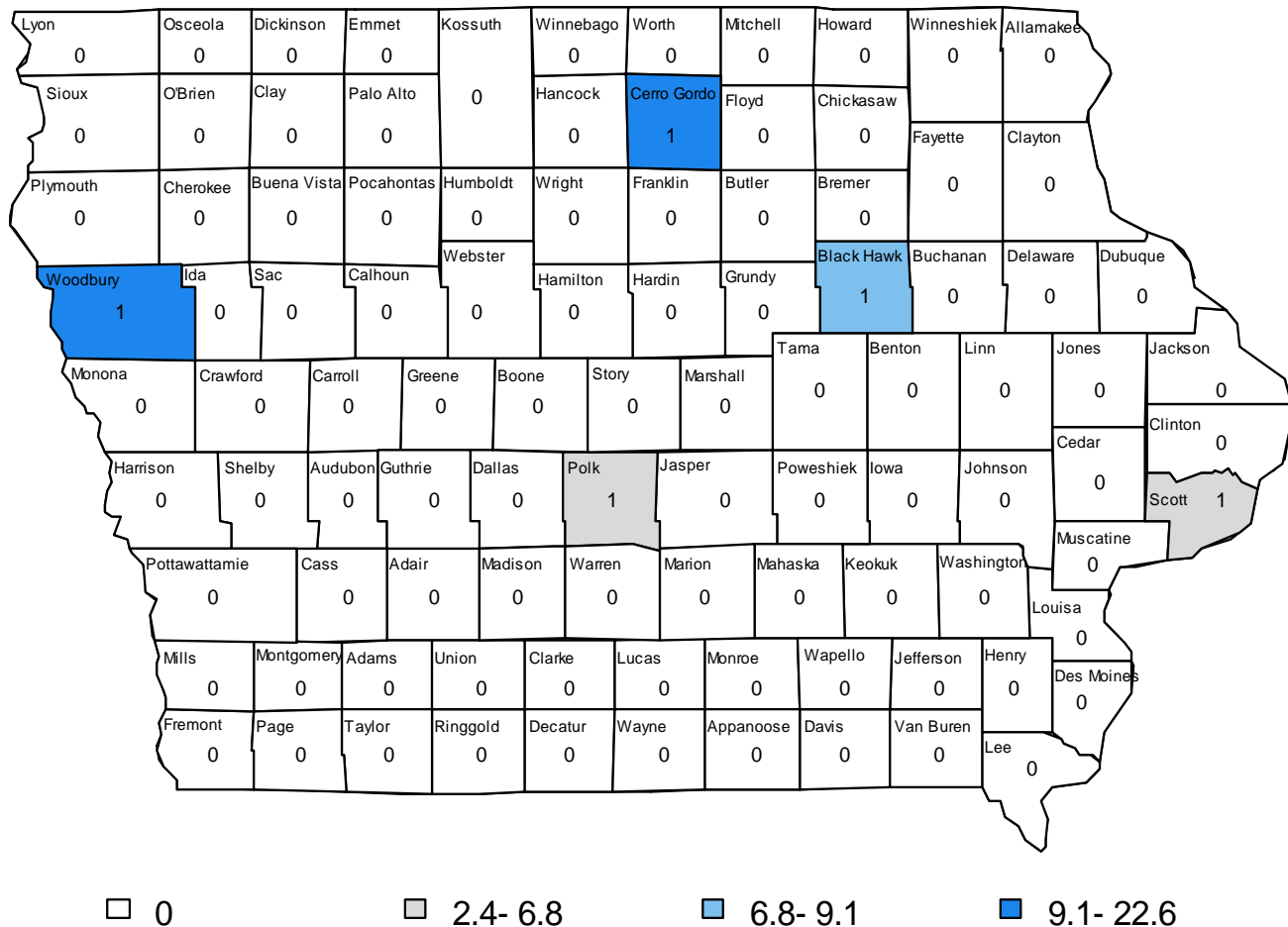
2007 Crude Rates by County Group



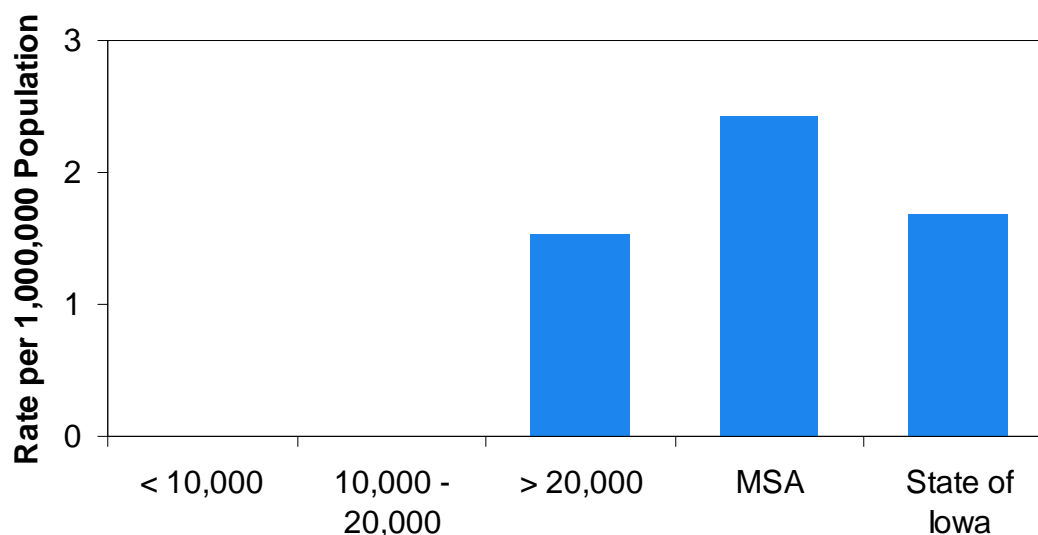
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Regional Trauma Care Facilities

2007 Counts and Crude Rates per 1,000,000 (shaded)



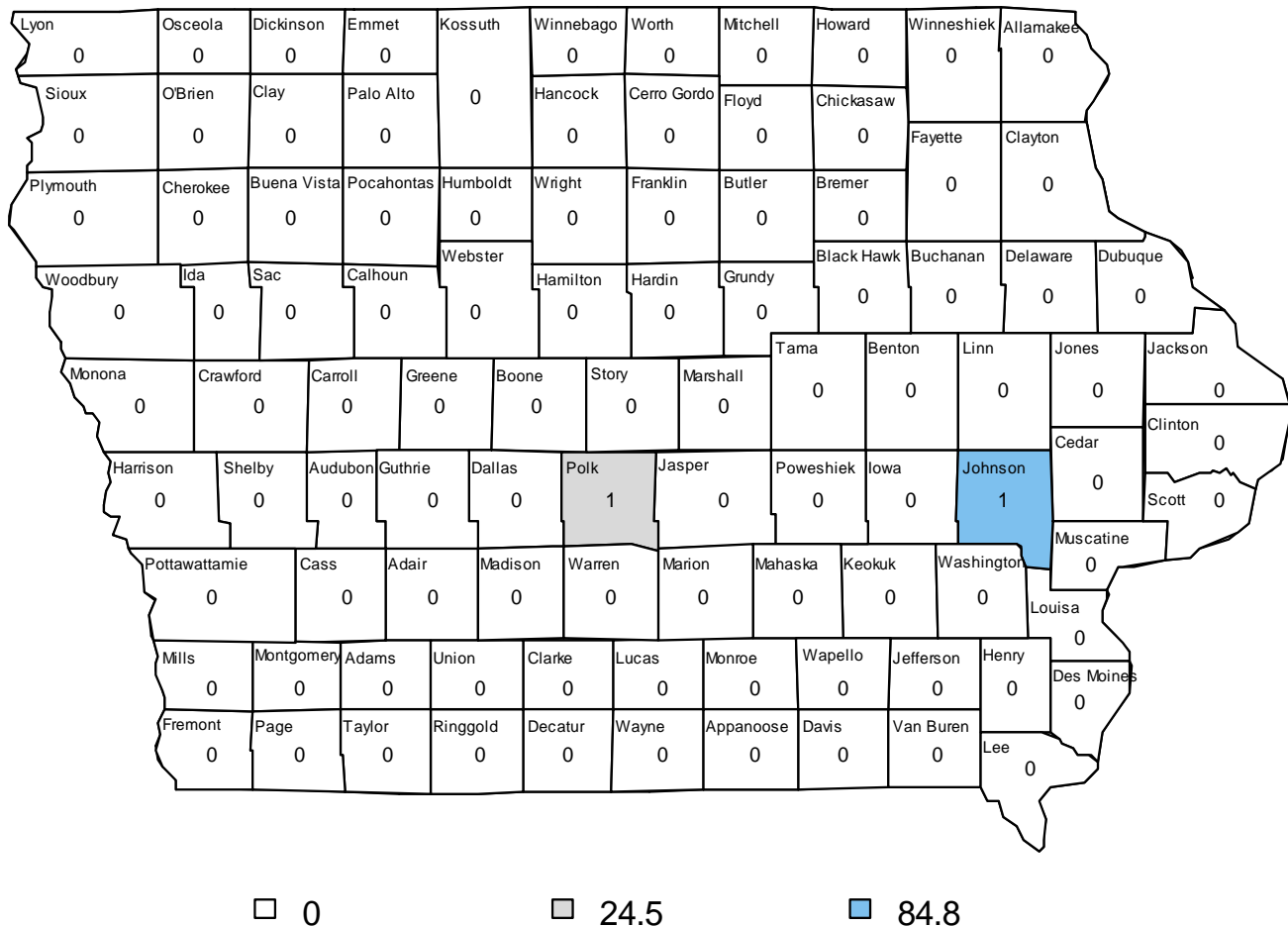
2007 Crude Rates by County Group



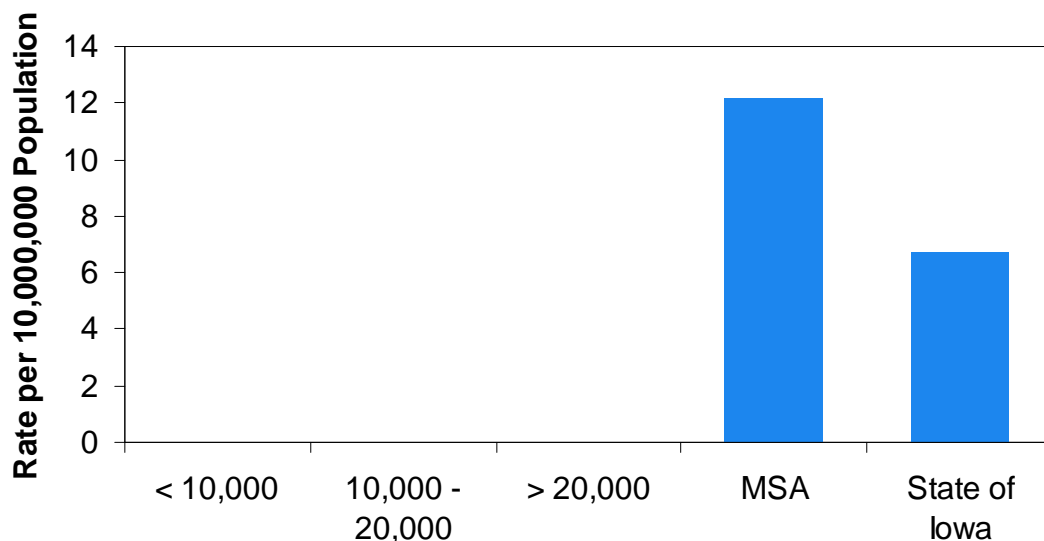
Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

Resource Trauma Care Facilities

2007 Counts and Crude Rates per 10,000,000 (shaded)



2007 Crude Rates by County Group



Source: Bureau of Emergency Medical Services, Iowa Department of Public Health

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Environmental Health Indicators

Whether we consider global warming or water quality, it is clear that our environment affects us both directly and indirectly. While some environmental health issues have existed since the beginning of the human race, most have become evident in the last few centuries. These problems have emerged as a result of our growing and changing population. The industrial revolution has created air and water pollution problems as well as overcrowding and sanitation issues. As of June 2007, over 6.6 billion people inhabited the earth.

The environment plays a role in many health issues previously discussed including birth defects, cancer, respiratory diseases, and many infectious diseases. Other concerns include allergies, fertility, and exposure to animal and insect vectors. In Iowa, public health officials are especially concerned with the quality of their drinking water, recreational waters, indoor and outdoor air quality, lead poisoning, safe housing, and hazardous and solid waste.

As we attempt to provide food, water, and shelter for the world's population, we must remain aware of how our actions affect our local and global environment. At the same time, we must monitor and attempt to prevent any adverse health conditions that are caused by interactions with the environment.

ISSUES IN IOWA...

- ✓ Drinking water quality
- ✓ Recreational water quality
- ✓ Indoor and outdoor air quality
- ✓ Lead poisoning
- ✓ Safe housing
- ✓ Hazardous and solid waste

Childhood Blood Lead Poisoning

Childhood lead poisoning has significant effects on the health of children and on community health. Lead has adverse effects on nearly all organ systems in the body. It is especially harmful to the developing brains and nervous systems of children under the age of six years. At very high blood lead levels, children can suffer severe brain damage or even die. At blood lead levels as low as 10 micrograms per deciliter ($\mu\text{g/dL}$), a child's intelligence, hearing, and growth are affected. In a community, the presence of lead-poisoned children can be associated with an increase in the number of children with developmental deficits and learning disorders. This places an unnecessary and expensive burden on the educational system. The presence of lead-poisoned children also requires substantial community public health resources for medical and environmental case management services.

High blood lead levels have adverse effects on nearly all organ systems in the body, and are especially harmful to children.

Most cases of childhood lead poisoning are caused by lead-based paint, which is found in most homes built before 1960. Young children who live in pre-1960 homes become lead-poisoned when they put paint chips or exterior soil in their mouths or when they get house dust and soil on their hands and put their hands in their mouths.

Although lead poisoning can cause serious health problems – including death – most lead-poisoned children demonstrate no visible symptoms. This makes it much more important to have an effective program to prevent childhood lead poisoning.

Most cases of childhood lead poisoning are caused by lead-based paints found in homes built before 1960.

Since 1992, the Iowa Department of Public Health (IDPH) has recommended that all children in Iowa under the age of six years be tested for lead poisoning. In addition, state and federal laws require that all children under the age of six and covered by Medicaid be tested for lead poisoning. In spite of this, the statewide testing rates among children covered by Medicaid

and children who are not covered by Medicaid are virtually identical. On April 17, 2007, Governor Culver signed legislation requiring all Iowa children to receive a blood lead test before the age of mandatory school attendance.

In Iowa, blood lead testing is conducted by the Title V Child's Health Program, local health departments, and by many private physicians. The IDPH childhood blood lead level surveillance system tracks all testing in the state. Thus, blood lead testing results collected as required by Medicaid, as well as those collected from voluntary testing of non-Medicaid children are reported to IDPH.

In the following tables, data are presented for children who were born in calendar year 1999 and 2000 and who received at least one blood lead test before their sixth birthday. Children followed for blood lead poisoning may be tested multiple times. The test results that are presented in the following tables reflect the highest blood lead level for any particular child.

For each county, the number of children receiving a blood lead test who were identified with blood levels greater than or equal to 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$). A blood level of 10 $\mu\text{g}/\text{dL}$ has been identified by the Centers for Disease Control and Prevention as the threshold for lead poisoning in children and is categorized as "high" for the graphs. Additional data, such as the percent of children in each birth cohort who were tested for lead poisoning, are also presented.

For Iowa children born in 1999-2000, 64 percent were tested for lead poisoning, and 6.7 percent of these children had blood lead levels greater than or equal to 10 $\mu\text{g}/\text{dL}$.

Of the children born in Iowa in 1999, 61.5 percent received at least one blood test before their sixth birthday (range by county: 23.6 to 100 percent), and 6.9 percent of these children had blood levels greater than or equal to 10 $\mu\text{g}/\text{dL}$ (range by county: 0.0 to 22.6 percent). Of the children born in Iowa in 2000, 66.5 percent received at least one blood test before their sixth birthday (range by county: 23.3 to 100 percent), and 6.6 percent of these children had blood levels greater than or equal to 10 $\mu\text{g}/\text{dL}$ (range by county: 0.0 to 20 percent).

Percent of Children Tested for Blood Lead Poisoning, 1999-2000¹

	County	1999	2000	County	1999	2000
Counties with Average Population < 10,000	Adair	77.5%	72.1%	Monona	44.3%	59.2%
	Adams	80.9%	80.0%	Monroe	78.0%	64.7%
	Audubon	60.3%	87.2%	Osceola	27.4%	23.3%
	Clarke	69.2%	81.4%	Palo Alto	47.1%	54.5%
	Davis	42.2%	49.6%	Pocahontas	43.9%	43.8%
	Decatur	68.9%	76.2%	Ringgold	60.9%	66.7%
	Fremont	62.2%	67.1%	Taylor	100.0%	89.7%
	Howard	63.2%	66.4%	Van Buren	30.6%	45.4%
	Ida	50.0%	60.0%	Wayne	66.7%	97.5%
	Lucas	85.6%	89.9%	Worth	65.8%	70.2%
				County Grp %	60.3%	66.6%
Counties with Average Population 10,000 – 20,000	Allamakee	81.7%	89.9%	Hardin	93.6%	100.0%
	Appanoose	51.9%	54.9%	Humboldt	61.5%	87.9%
	Butler	66.0%	62.9%	Iowa	69.7%	63.4%
	Calhoun	41.7%	61.7%	Jefferson	44.9%	47.6%
	Cass	80.0%	73.4%	Keokuk	48.8%	54.5%
	Cedar	72.9%	68.4%	Kossuth	56.2%	50.6%
	Cherokee	59.0%	50.0%	Louisa	67.7%	72.0%
	Chickasaw	81.9%	78.1%	Lyon	35.7%	35.2%
	Clay	49.7%	57.8%	Mitchell	42.1%	42.0%
	Clayton	70.5%	83.5%	Montgomery	59.6%	64.7%
	Crawford	72.7%	78.3%	O'Brien	30.6%	27.3%
	Delaware	46.9%	52.0%	Page	63.3%	62.1%
	Dickinson	25.6%	28.3%	Poweshiek	54.5%	56.6%
	Emmet	25.8%	29.4%	Sac	40.6%	51.9%
	Floyd	76.0%	69.8%	Shelby	54.6%	50.0%
	Franklin	100.0%	100.0%	Tama	69.6%	78.5%
	Greene	88.0%	100.0%	Union	60.0%	79.5%
	Hamilton	68.4%	77.1%	Winnebago	68.6%	73.1%
	Hancock	55.9%	64.9%	Wright	82.4%	83.9%
				County Grp %	61.8%	64.7%
Counties with Average Population > 20,000	Boone	63.8%	76.0%	Lee	59.4%	68.3%
	Buchanan	57.7%	64.1%	Mahaska	65.1%	74.2%
	Buena Vista	23.6%	32.2%	Marion	74.8%	89.8%
	Carroll	54.0%	52.7%	Marshall	100.0%	100.0%
	Cerro Gordo	72.6%	81.7%	Muscatine	63.3%	71.9%
	Clinton	86.8%	93.7%	Plymouth	43.6%	51.8%
	Des Moines	81.2%	91.0%	Sioux	47.1%	41.8%
	Fayette	63.0%	80.7%	Wapello	94.1%	100.0%
	Henry	80.9%	83.3%	Webster	72.1%	74.8%
	Jackson	79.8%	92.5%	Winneshiek	74.2%	74.3%
	Jasper	44.0%	49.8%	County Grp %	69.0%	75.4%
MSA Counties	Benton	68.7%	61.5%	Linn	67.2%	71.0%
	Black Hawk	77.4%	81.6%	Madison	40.4%	63.8%
	Bremer	69.1%	73.2%	Mills	62.8%	69.0%
	Dallas	58.3%	63.3%	Polk	53.6%	59.3%
	Dubuque	62.0%	61.4%	Pottawattamie	41.4%	56.7%
	Grundy	79.8%	90.2%	Scott	79.1%	82.7%
	Guthrie	52.9%	74.6%	Story	64.4%	61.6%
	Harrison	34.6%	43.0%	Warren	43.5%	45.4%
	Johnson	42.4%	48.4%	Washington	44.8%	60.3%
	Jones	68.4%	80.6%	Woodbury	42.7%	48.8%
				County Grp %	58.6%	63.8%
State %		61.5%	66.5%			

¹Children born in years 1999, 2000

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

Elevated Levels of Blood Lead: Children Born in 1999¹

	County	# Born	# Tested	≥ 10 µg/dL	Total % High	County	# Born	# Tested	≥ 10 µg/dL	Total % High
Counties with Average Population < 10,000	Adair	71	55	4	7.3%	Monona	115	51	3	5.9%
	Adams	47	38	4	10.5%	Monroe	100	78	7	9.0%
	Audubon	68	41	3	7.3%	Osceola	73	20	0	0.0%
	Clarke	107	74	8	10.8%	Palo Alto	104	49	2	4.1%
	Davis	102	43	0	0.0%	Pocahontas	82	36	0	0.0%
	Decatur	90	62	14	22.6%	Ringgold	69	42	1	2.4%
	Fremont	98	61	5	8.2%	Taylor	66	66	12	18.2%
	Howard	117	74	6	8.1%	Van Buren	85	26	0	0.0%
	Ida	80	40	5	12.5%	Wayne	75	50	13	26.0%
	Lucas	97	83	12	14.5%	Worth	76	50	5	10.0%
						Total	1,722	1,039	104	10.0%
Counties with Average Population 10,000 – 20,000	Allamakee	186	152	17	11.2%	Hardin	235	220	22	10.0%
	Appanoose	158	82	3	3.7%	Humboldt	130	80	5	6.3%
	Butler	159	105	7	6.7%	Iowa	178	124	13	10.5%
	Calhoun	103	43	1	2.3%	Jefferson	158	71	6	8.5%
	Cass	155	124	15	12.1%	Keokuk	125	61	5	8.2%
	Cedar	181	132	15	11.4%	Kossuth	162	91	6	6.6%
	Cherokee	134	79	9	11.4%	Louisa	164	111	11	9.9%
	Chickasaw	138	113	8	7.1%	Lyon	154	55	3	5.5%
	Clay	195	97	4	4.1%	Mitchell	133	56	2	3.6%
	Clayton	193	136	16	11.8%	Montgomery	146	87	7	8.0%
	Crawford	205	149	18	12.1%	O'Brien	180	55	7	12.7%
	Delaware	196	92	11	12.0%	Page	196	124	18	14.5%
	Dickinson	172	44	2	4.5%	Poweshiek	176	96	14	14.6%
	Emmet	124	32	2	6.3%	Sac	128	52	3	5.8%
	Floyd	192	146	12	8.2%	Shelby	141	77	3	3.9%
	Franklin	120	120	11	9.2%	Tama	240	167	21	12.6%
	Greene	125	110	4	3.6%	Union	140	84	9	10.7%
	Hamilton	206	141	14	9.9%	Winnebago	121	83	2	2.4%
	Hancock	127	71	4	5.6%	Wright	165	136	14	10.3%
						Total	6,141	3,798	344	9.1%
Counties with Average Population > 20,000	Boone	318	203	7	3.4%	Lee	466	277	22	7.9%
	Buchanan	298	172	9	5.2%	Mahaska	301	196	6	3.1%
	Buena Vista	254	60	1	1.7%	Marion	432	323	10	3.1%
	Carroll	252	136	9	6.6%	Marshall	573	573	79	13.8%
	Cerro Gordo	551	400	18	4.5%	Muscatine	619	392	43	11.0%
	Clinton	629	546	49	9.0%	Plymouth	289	126	14	11.1%
	Des Moines	520	422	32	7.6%	Sioux	397	187	21	11.2%
	Fayette	230	145	12	8.3%	Wapello	404	380	35	9.2%
	Henry	246	199	19	9.5%	Webster	498	359	22	6.1%
	Jackson	238	190	8	4.2%	Winneshiek	186	138	6	4.3%
	Jasper	457	201	4	2.0%	Total	8,158	5,625	426	7.6%
MSA Counties	Benton	265	182	10	5.5%	Linn	2,745	1,844	137	7.4%
	Black Hawk	1,594	1,233	87	7.1%	Madison	188	76	4	5.3%
	Bremer	236	163	7	4.3%	Mills	156	98	5	5.1%
	Dallas	504	294	8	2.7%	Polk	5,954	3,190	128	4.0%
	Dubuque	1,154	715	35	4.9%	Pottawattamie	1,216	503	25	5.0%
	Grundy	104	83	2	2.4%	Scott	2,264	1,790	128	7.2%
	Guthrie	140	74	7	9.5%	Story	885	570	20	3.5%
	Harrison	179	62	2	3.2%	Warren	483	210	2	1.0%
	Johnson	1,332	565	12	2.1%	Washington	306	137	8	5.8%
	Jones	196	134	10	7.5%	Woodbury	1,627	695	73	10.5%
						Total	21,528	12,618	710	5.6%
State Total		37,549	23,080	1,584	6.9%					

¹Children tested before six years of age

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

Elevated Levels of Blood Lead: Children Born in 2000¹

	County	# Born	# Tested	≥ 10 µg/dL	Total % High	County	# Born	# Tested	≥ 10 µg/dL	Total % High
Counties with Average Population < 10,000	Adair	68	49	2	4.1%	Monona	98	58	6	10.3%
	Adams	35	28	1	3.6%	Monroe	102	66	1	1.5%
	Audubon	47	41	2	4.9%	Osceola	73	17	2	11.8%
	Clarke	97	79	7	8.9%	Palo Alto	110	60	1	1.7%
	Davis	129	64	2	3.1%	Pocahontas	73	32	0	0.0%
	Decatur	101	77	12	15.6%	Ringgold	69	46	5	10.9%
	Fremont	82	55	1	1.8%	Taylor	87	78	11	14.1%
	Howard	110	73	2	2.7%	Van Buren	97	44	2	4.5%
	Ida	70	42	5	11.9%	Wayne	79	77	12	15.6%
	Lucas	119	107	19	17.8%	Worth	84	59	2	3.4%
						Total	1,730	1,152	95	8.2%
Counties with Average Population 10,000 – 20,000	Allamakee	158	142	12	8.5%	Hardin	208	208	25	12.0%
	Appanoose	142	78	4	5.1%	Humboldt	99	87	3	3.4%
	Butler	170	107	8	7.5%	Iowa	183	116	14	12.1%
	Calhoun	107	66	5	7.6%	Jefferson	145	69	4	5.8%
	Cass	158	116	12	10.3%	Keokuk	154	84	5	6.0%
	Cedar	206	141	11	7.8%	Kossuth	166	84	2	2.4%
	Cherokee	146	73	5	6.8%	Louisa	164	118	5	4.2%
	Chickasaw	169	132	11	8.3%	Lyon	159	56	3	5.4%
	Clay	204	118	5	4.2%	Mitchell	131	55	3	5.5%
	Clayton	194	162	18	11.1%	Montgomery	139	90	7	7.8%
	Crawford	189	148	11	7.4%	O'Brien	187	51	6	11.8%
	Delaware	227	118	12	10.2%	Page	169	105	21	20.0%
	Dickinson	159	45	1	2.2%	Poweshiek	212	120	13	10.8%
	Emmet	126	37	2	5.4%	Sac	135	70	3	4.3%
	Floyd	199	139	15	10.8%	Shelby	150	75	1	1.3%
	Franklin	113	113	13	11.5%	Tama	251	197	16	8.1%
	Greene	92	92	11	12.0%	Union	127	101	17	16.8%
	Hamilton	192	148	7	4.7%	Winnebago	134	98	3	3.1%
	Hancock	131	85	4	4.7%	Wright	168	141	15	10.6%
						Total	6,163	3,985	333	8.4%
Counties with Average Population > 20,000	Boone	317	241	15	6.2%	Lee	410	280	21	7.5%
	Buchanan	301	193	18	9.3%	Mahaska	283	210	9	4.3%
	Buena Vista	233	75	2	2.7%	Marion	383	344	6	1.7%
	Carroll	262	138	11	8.0%	Marshall	556	556	90	16.2%
	Cerro Gordo	530	433	15	3.5%	Muscatine	638	459	35	7.6%
	Clinton	591	554	39	7.0%	Plymouth	309	160	11	6.9%
	Des Moines	555	505	53	10.5%	Sioux	457	191	12	6.3%
	Fayette	233	188	9	4.8%	Wapello	424	424	35	8.3%
	Henry	264	220	13	5.9%	Webster	492	368	28	7.6%
	Jackson	239	221	26	11.8%	Winneshiek	191	142	8	5.6%
	Jasper	458	228	5	2.2%	Total	8,126	6,130	461	7.5%
MSA Counties	Benton	325	200	19	9.5%	Linn	2,715	1,929	157	8.1%
	Black Hawk	1,551	1,266	93	7.3%	Madison	196	125	10	8.0%
	Bremer	250	183	9	4.9%	Mills	155	107	9	8.4%
	Dallas	566	358	13	3.6%	Polk	6,216	3,684	157	4.3%
	Dubuque	1,221	750	35	4.7%	Pottawattamie	1,184	671	25	3.7%
	Grundy	133	120	7	5.8%	Scott	2,348	1,941	118	6.1%
	Guthrie	134	100	8	8.0%	Story	964	594	11	1.9%
	Harrison	193	83	3	3.6%	Warren	513	233	1	0.4%
	Johnson	1,382	669	14	2.1%	Washington	290	175	10	5.7%
	Jones	227	183	6	3.3%	Woodbury	1,692	826	91	11.0%
						Total	22,255	14,197	796	5.6%
	State Total	38,274	25,464	1,685	6.6%					

¹Children tested before six years of age

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

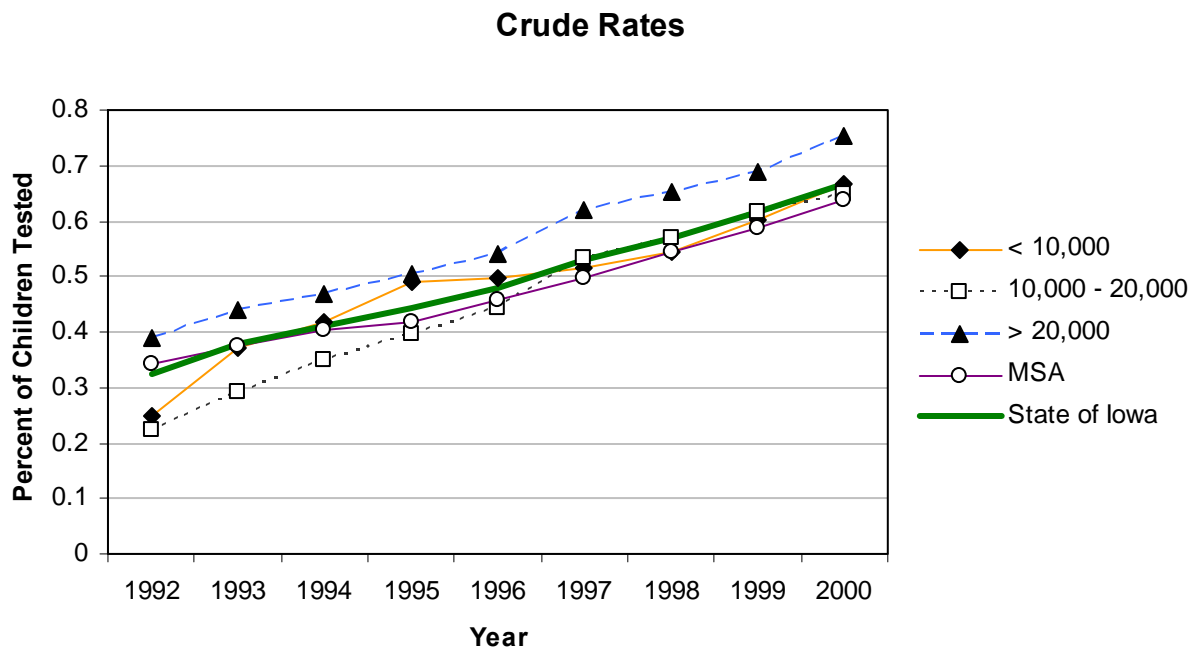
Elevated Levels of Blood Lead: Children Born in 1999-2000¹

	County	Number Tested	% with High Levels	County	Number Tested	% with High Levels
Counties with Average Population < 10,000	Adair	104	5.8%	Monona	109	8.3%
	Adams	66	7.6%	Monroe	144	5.6%
	Audubon	82	6.1%	Osceola	37	5.4%
	Clarke	153	9.8%	Palo Alto	109	2.8%
	Davis	107	1.9%	Pocahontas	68	0.0%
	Decatur	139	18.7%	Ringgold	88	6.8%
	Fremont	116	5.2%	Taylor	144	16.0%
	Howard	147	5.4%	Van Buren	70	2.9%
	Ida	82	12.2%	Wayne	127	19.7%
	Lucas	190	16.3%	Worth	109	6.4%
				Total	2,191	9.1%
Counties with Average Population 10,000 – 20,000	Allamakee	294	9.9%	Hardin	428	11.0%
	Appanoose	160	4.4%	Humboldt	167	4.8%
	Butler	212	7.1%	Iowa	240	11.3%
	Calhoun	109	5.5%	Jefferson	140	7.1%
	Cass	240	11.3%	Keokuk	145	6.9%
	Cedar	273	9.5%	Kossuth	175	4.6%
	Cherokee	152	9.2%	Louisa	229	7.0%
	Chickasaw	245	7.8%	Lyon	111	5.4%
	Clay	215	4.2%	Mitchell	111	4.5%
	Clayton	298	11.4%	Montgomery	177	7.9%
	Crawford	297	9.8%	O'Brien	106	12.3%
	Delaware	210	11.0%	Page	229	17.0%
	Dickinson	89	3.4%	Poweshiek	216	12.5%
	Emmet	69	5.8%	Sac	122	4.9%
	Floyd	285	9.5%	Shelby	152	2.6%
	Franklin	233	10.3%	Tama	364	10.2%
	Greene	202	7.4%	Union	185	14.1%
	Hamilton	289	7.3%	Winnebago	181	2.8%
	Hancock	156	5.1%	Wright	277	10.5%
				Total	7,783	8.7%
Counties with Average Population > 20,000	Boone	444	5.0%	Lee	557	7.7%
	Buchanan	365	7.4%	Mahaska	406	3.7%
	Buena Vista	135	2.2%	Marion	667	2.4%
	Carroll	274	7.3%	Marshall	1,129	15.0%
	Cerro Gordo	833	4.0%	Muscatine	851	9.2%
	Clinton	1,100	8.0%	Plymouth	286	8.7%
	Des Moines	927	9.2%	Sioux	378	8.7%
	Fayette	333	6.3%	Wapello	804	8.7%
	Henry	419	7.6%	Webster	727	6.9%
	Jackson	411	8.3%	Winneshiek	280	5.0%
	Jasper	429	2.1%	Total	11,755	7.5%
MSA Counties	Benton	382	7.6%	Linn	3,773	7.8%
	Black Hawk	2,499	7.2%	Madison	201	7.0%
	Bremer	346	4.6%	Mills	205	6.8%
	Dallas	652	3.2%	Polk	6,874	4.1%
	Dubuque	1,465	4.8%	Pottawattamie	1,174	4.3%
	Grundy	203	4.4%	Scott	3,731	6.6%
	Guthrie	174	8.6%	Story	1,164	2.7%
	Harrison	145	3.4%	Warren	443	0.7%
	Johnson	1,234	2.1%	Washington	312	5.8%
	Jones	317	5.0%	Woodbury	1,521	10.8%
				Total	26,815	5.6%
	State Total	48,544	6.7%			

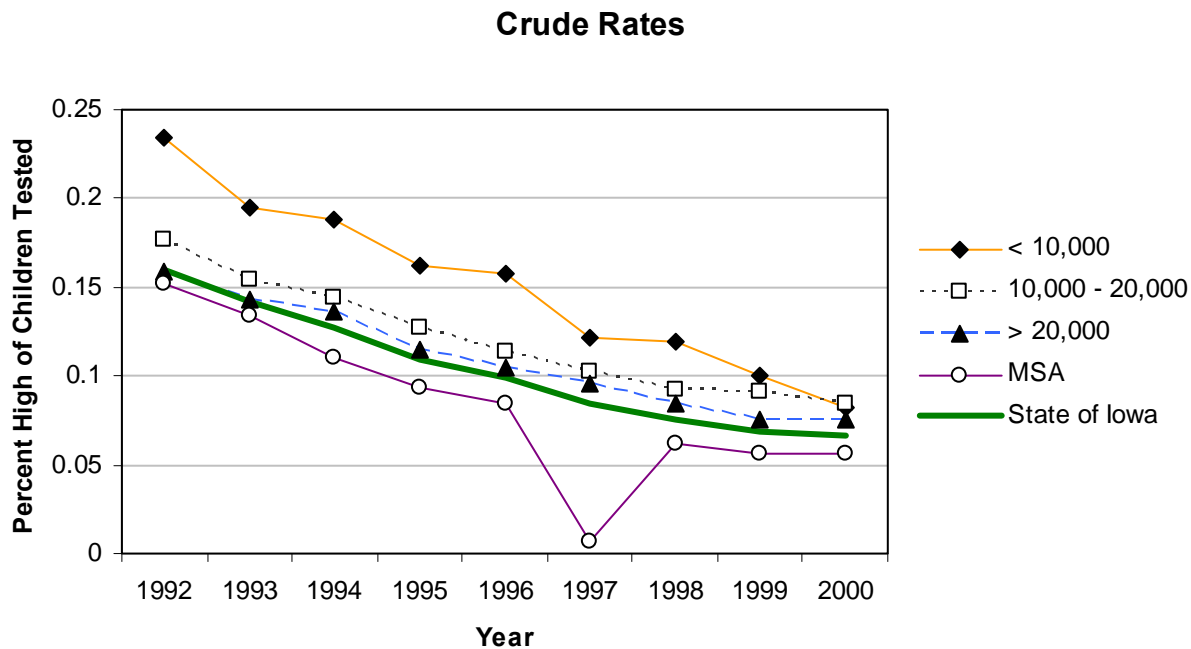
¹Children tested before six years of age

Source: Iowa Department of Public Health, Bureau of Lead Poisoning Prevention

Tested for Blood Lead: Children Born in 1992-2000



Elevated Levels of Blood Lead: Children Born in 1992-2000



Appendix I: Data Sources

Fact Book Item	Data Source
Introduction	
Healthy Iowans 2010 Leading Indicators	Iowa Department of Public Health and website: www.idph.state.ia.us/adper/healthy_iowans_2010.asp
Demographics	
State Population Distributions for 1970-2004	Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database, National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2007.
State Population Distributions for 2005-2006	US Census Bureau Website: www.census.gov
Health and Social Behaviors	
Behavioral Risk Factor Surveillance System (BRFSS)	Centers for Disease Control & Prevention Website: www.cdc.gov/brfss
Iowa Adult Tobacco Survey	Iowa Department of Public Health Division of Tobacco Use Prevention & Control in cooperation with the Centers for Disease Control and Prevention Office on Smoking and Health
Substance Abuse Treatment	Iowa Consortium for Substance Abuse Research
Marriages	Iowa Department of Public Health Vital Statistics
Dissolutions	

Prenatal and Infant Health

Live Births	Iowa Department of Public Health, Vital Statistics, Birth Certificates
Out-Of-Wedlock Births	
Mothers Under Age 20	
Low Birth Weight	
Mothers Who Began Prenatal Care in the First Trimester	
Mothers Who Smoked During Pregnancy	Iowa Department of Public Health, Vital Statistics, Death Certificates
Mothers Who Drank During Pregnancy	
Fetal Deaths	
Neonatal Deaths	
Perinatal Deaths	
Infant Deaths	Iowa Center for Congenital and Inherited Disorders, The University of Iowa
Birth Defects	
Selected Birth Defects in Iowa	

Infectious Diseases

Sexually Transmitted Diseases	Bureau of Disease Prevention and Immunization via Iowa Department of Public Health
Infectious Diseases	Bureau of Infectious Diseases via Iowa Department of Public Health

Cancer Incidence and Mortality

All Sites of Cancer	<i>All cancer incidence data from:</i> The University of Iowa, State Health Registry of Iowa via NCI's SEER*Stat Program.
Prostate	
Lung	
Female Breast	
Colorectal	<i>All cancer mortality data from:</i> "Cause of Death" codes on death certificates filed with Vital Records, Iowa Department of Public Health via NCHS and NCI's SEER*Stat Program, version 6.3.
Non-Hodgkin's Lymphoma	
Leukemia	
Skin Melanoma	
Oral Cavity (Excluding Lip)	
Cervical	

Injury Mortality

All Transportation
 Motor Vehicle Traffic
 Suicide
 Firearms
 Falls
 Homicide
 Poisoning
 Burns
 Drowning
 All Other Unintentional

“Cause of Death” codes on death certificates filed with Vital Records, Iowa Department of Public Health. Analyses conducted by The University of Iowa, State Health Registry of Iowa.

Youth Injury Mortality

All Transportation Ages 0-14
 All Transportation Ages 15-19
 Motor Vehicle Traffic Ages 0-14
 Motor Vehicle Traffic Ages 15-19
 Suicide Ages 0-14
 Suicide Ages 15-19
 Homicide Ages 0-14
 Homicide Ages 15-19

“Cause of Death” codes on death certificates filed with Vital Records, Iowa Department of Public Health. Analyses conducted by the University of Iowa, State Health Registry of Iowa.

Other Mortality

All Causes
 Heart Disease
 Stroke
 Chronic Obstructive Pulmonary Disease
 Pneumonia/Influenza
 Diabetes Mellitus
 Atherosclerosis
 Infectious/Parasitic
 Nephritis, Nephrotic Syndrome, Nephrosis
 Chronic Liver Disease and Cirrhosis
 Congenital Anomalies
 Conditions Originating in the Perinatal Period
 Alzheimer’s

“Cause of Death” codes on death certificates filed with Vital Records, Iowa Department of Public Health via NCHS and NCI’s SEER*Stat Program.

Health Care Providers

Total Physicians	Office of Statewide Clinical Education Programs (OSCEP), College of Medicine, The University of Iowa
Primary Care Physicians	
Family Practice Physicians	
Internal Medicine Physicians	
Pediatric Physicians	
Obstetrics/Gynecology Physicians	
General Surgeons	
Other Specialty Physicians	
Physician Assistants	
Advanced Practical Nurses	
Pharmacists	
Dentists	
Emergency Care Providers: Total	Bureau of Emergency Medical Services via Iowa Department of Public Health
First Responders	
Emergency Medical Technicians: Basic	
Emergency Medical Technicians: Intermediate	
Emergency Medical Technicians: Paramedic	
Emergency Medical Technicians: Paramedic Specialist	

Health Care Facilities

Hospitals	Department of Inspections and Appeals via Iowa
Hospital Beds	Department of Public Health
Nursing Facilities	
Nursing Facility Beds	
Chronic Confusion or Dementing Illness Units	
Chronic Confusion or Dementing Illness Beds	
Intermediate Care Facilities for the Mentally Retarded	
Intermediate Care Facilities for the Mentally Retarded Beds	
Residential Care Facilities	
Residential Care Facilities Beds	
Residential Care Facilities for Persons with Mental Illness	
Residential Care Facilities for Persons with Mental Illness Beds	
Residential Care Facilities for the Mentally Retarded	
Residential Care Facilities for the Mentally Retarded Beds	
3 to 5 Bed Units for the Mentally Retarded	
3 to 5 Bed Units for the Mentally Retarded Beds	
Psychiatric Medical Institutions for Children	
Psychiatric Medical Institutions for Children Beds	
Total Trauma Facilities	Bureau of Emergency Medical Services via
Community Trauma Care Facilities	Iowa Department of Public Health
Area Trauma Care Facilities	
Regional Trauma Care Facilities	
Resource Trauma Care Facilities	

Environmental Indicators

Childhood Lead Poisoning	Iowa Department of Public Health Bureau of Lead Poisoning Prevention
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Appendix II: Glossary of Terms

Glossary of Terms

Age-Adjusted Rate (Direct Method): A weighted average of the age-specific incidence or mortality rates from the targeted population(s) where the weights are the proportions of persons in the corresponding age groups of a standard population. In this document, the Year 2000 U.S. population is used as the standard population. Calculating an age-adjusted rate allows for comparisons across targeted populations after accounting or “adjusting” for possible differences in the age-distribution of these populations.

Area Trauma Care Facility: Provides initial evaluation and stabilization, including surgical intervention for the severely injured patient. An area trauma care facility provides comprehensive inpatient services to patients who can be maintained in a stable or improving condition without specialized care. Critically injured patients who require specialized care are transferred to a resource or regional trauma care facility. An organized trauma team including a general surgeon, emergency physician, CRNA and/or anesthesiologist, nursing and ancillary personnel are promptly available to meet the patient upon arrival at the emergency department. The general surgeon, emergency physician, and ancillary personnel may be on-call from outside the hospital but with a clear commitment to meet a patient upon arrival at the emergency department when given timely notice by out-of-hospital EMS providers. Some area trauma care facilities elect to provide in-house 24-hour emergency physician coverage. In addition to direct patient care, area trauma care facilities provide community and outreach education and injury prevention programs.

Chronic Confusion or Dementing Illness Units: “Chronic Confusion or Dementing Illness” is a special license classification for nursing facilities or a special unit within such a facility providing care to persons who suffer from chronic confusion or dementing illness. Reference to Chronic Confusion or Dementing Illness Units is made in the acts and joint resolutions of the 1990 regular session of the Seventy-Third General Assembly of the State of Iowa.

Community Trauma Care Facility: Provides initial evaluation and stabilization of the severely injured patient. Stabilization may include surgical intervention. Most patients needing surgical intervention and/or specialty care are transferred to resource or regional trauma care facilities. Community trauma care facilities have the necessary equipment and diagnostic resources to resuscitate the severely injured patient. An organized team including a physician, nursing and ancillary personnel are promptly available to meet the patient upon arrival at the emergency department if given timely notice by out-of-hospital EMS providers. In addition to patient care, a community trauma care facility provides continuing education and injury prevention programs.

Crude Rate: The number of events or occurrences of disease in a given time period divided by the population at risk for that event or disease over the same time period.

Emergency Medical Technician – Basic: The EMT-B course emphasizes the development of student skills in patient assessment and examination; the recognition of signs and symptoms of illness or injury; proper procedures when rendering emergency medical care including patient assisted medications, automated external defibrillation, maintenance of a non-medicated IV, and the use of an advanced airway device. General topics covered include: human anatomy and physiology, bleeding and shock, bandaging and splinting, medical/behavior emergencies, obstetrics/gynecology, extrication from automobiles, farm, industrial and environmental emergencies, and ambulance operations.

Emergency Medical Technician – Intermediate: The EMT-I course involves additional training in patient assessment, intravenous therapy, advanced airway management techniques and automated defibrillation.

Emergency Medical Technician – Paramedic: This level covers additional emergency medical care skills including cardiac evaluation and treatment, medication effects and treatment, and advanced airway management techniques.

Emergency Medical Technician – Paramedic Specialist: This level identifies individuals who have successfully completed a program of training that used, as a minimum, the 1985 EMT-P national standard curriculum (NSC), plus documentation of completion of the objectives to the 1998 EMT-P NSC, or completed the 1998 EMT-P NSC and have successfully completed the department's testing requirements.

Fetal Death: A birth that fails to show any sign of life after delivery. Reportable fetal deaths in Iowa are those greater than 20 weeks gestation. The responsibility for determining if a birth meets this definition is that of the attending physician. "Fetal death" and "stillbirth" are synonymous terms.

First Responder: The First Responder is trained in patient stabilizing techniques and basic emergency medical care prior to the arrival of an ambulance. Skills in this program include patient assessment, vital signs, automated external defibrillation, oxygen delivery, and use of an advanced airway device.

Hospital: Any place which is devoted primarily to the maintenance of facilities for the diagnosis, treatment, or care of two or more non-related individuals suffering from illness, injury, or deformity for a period exceeding 24 hours. It is also a place which is devoted primarily to the rendering of obstetrical or other medical/nursing care for two or more non-related individuals for a period exceeding 24 hours. It can be any institution, place, building or agency in which any accommodation is primarily maintained, furnished or offered for the care of two or more non-related aged or infirmed person requiring or receiving chronic or convalescent care for a period exceeding 24 hours. Hospitals shall include sanitariums or other related institutions within the meaning of the federal Hill-Burton Act. A hospital shall include, in any event, any facilities wholly or partially constructed, or constructed with federal assistance pursuant to Public Law 725, 79th Congress, approved August 13, 1946. Definition is found in Title 42 in the Code of Federal Regulations and 135J of the Iowa Administrative Code.

Infant Death: Death of a liveborn infant under one year of age. This includes both neonatal and postneonatal deaths.

Intermediate Care Facilities for the Mentally Retarded: Institutions or distinct parts of institutions whose primary purpose is to provide health or rehabilitative services to three or more individuals who primarily have mental retardation or a related condition. Intermediate Care Facilities for the Mentally Retarded must meet the requirements of Iowa Code Chapter 135C and federal standards codified in 42 United States Code 1936d, which is contained in Title 42 of the Code of Federal Regulations, Part 483, Subpart D, 410-480. Definition is found in Chapter 135C of the Code of Iowa.

Intermediate Care Facilities for Persons with Mental Illness: Institutions, places, buildings or agencies whose primary purpose is to provide accommodation, board and nursing care for a period exceeding 24 consecutive hours to three or more individuals who primarily have mental illness. Definition is found in Chapter 135C of the Code of Iowa.

Live Birth: A birth that shows any sign of life after delivery. The World Health Organization considers a sign of life as being the breathing or showing of any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. The responsibility for determining if a birth meets this definition is that of the attending physician.

Metropolitan Statistical Area (MSA): An area with one city of 50,000 or more inhabitants or a Census defined urbanized area and a total metropolitan population of at least 100,000 (75,000 in New England).

Neonatal Death: Death of a liveborn infant occurring within the first 27 days of life.

Nursing Facilities: Institutions or distinct parts of institutions housing three or more individuals for a period exceeding 24 consecutive hours, whose primary purpose is to provide health-related care and services, including rehabilitation, for individuals who because of mental or physical condition, require nursing care and other services in addition to room and board. Nursing facilities do not engage primarily in providing treatment or care for mental illness or mental retardation. Definition is found in Chapter 135C of the Code of Iowa.

Perinatal Death: Death of a fetus of greater than 20 weeks gestation or death of a liveborn infant under 28 days of life.

Primary Care Physicians: Includes Family Practice, Internal Medicine, Pediatric, and Obstetrics/Gynecology physicians.

Public Access Defibrillation: An EMS provider level for nontraditional providers of emergency medical care who have successfully completed a program that uses a curriculum that meets the approved Iowa objectives regarding Public Access Defibrillation and have successfully completed the department's testing requirements.

Residential Care Facilities: Institutions, places, buildings, or agencies providing accommodation, board, personal assistance and other essential daily living activities for a period exceeding 24 consecutive hours. Individuals living in a residential care facility are unable to sufficiently or properly care for themselves because of illness, disease, or physical or mental infirmity, but do not require the services of a registered or licensed practical nurse, except for emergencies. Definition is found in Chapter 135C of the Code of Iowa.

Residential Care and Specialized 3-5 Bed Facilities for the Mentally Retarded: Facilities that provide accommodations, board, personal assistance, essential activities of daily living and habilitation services to three or more individuals with mental retardation. Residents of a Residential Care Facility for the Mentally Retarded are unable to sufficiently or properly care for themselves, but do not require the services of a registered or licensed practical nurse. The specialized license is for Residential Care Facilities which serve persons with mental retardation, chronic mental illness and other developmental disabilities having five or fewer residents as specified in Iowa Code Section 225C.26. The facility is exempt from Iowa Code Section 135.63. Definition is found in Chapter 135C of the Code of Iowa.

Regional Trauma Care Facility: Provides comprehensive care for the severely injured patient with complex multisystem trauma. An organized trauma team including a general surgeon, emergency physician, anesthesiologist, nursing and ancillary personnel are immediately available to the patient upon arrival at the emergency department. The general surgeon and anesthesiologist are immediately available to the patient upon arrival at the emergency department. The general surgeon and anesthesiologist may take call from outside the hospital, but with a clear commitment to meet the patient upon arrival at the emergency department. A broad range of physician specialists are on-call and promptly available to provide care and/or consultation. In addition to direct patient care, regional trauma care facilities are responsible for community and outreach education and injury prevention.

Resource Trauma Care Facility: Provides the most comprehensive care for the severely injured patient with complex multisystem trauma. An organized trauma team including a general surgeon, emergency physician, anesthesiologist, nursing and ancillary personnel are immediately available to the patient upon arrival at the emergency department. Physician specialists may also respond immediately with the trauma team. A broad range of physician specialists are on-call and promptly available to provide care and/or consultation. In addition to direct patient care, resource trauma care facilities are responsible for resident training, research, community and outreach education and injury prevention.

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Appendix III: Coding and Classifications

Cancer Incidence and Mortality

Type of Cancer	Incidence	Mortality	
	ICD-O 2 ¹	ICD-9 ² (1979-1998)	ICD-10 ³ (1999-2002)
All Sites	C00.0-C80.9	140-208, 238.6	C00-C97
Cervical	C53.0-C53.9	180	C53
Colorectum	C18.0-C18.9, C19.9, C20.9, C26.0	153, 159.0, 154.0-154.1	C18, C26.0, C19-C20
Female Breast	C50.0-C50.9	174-175	C50
Leukemia	M9800-M9804, M9820-M9828, M9830, M9840-M9842, M9850, M9860-M9864, M9866-M9868, M9870-M9874, M9880, M9890-M9894, M9900, M9910, M9931-M9932, M9940-M941	202.4, 203.1, 204.0-204.2, 204.8-205.3, 205.8-206.2, 206.8-207.2, 207.8, 208.0-208.2, 208.8-208.9	C90.1, C91.0-C91.5, C91.7, C91.9-C92.5, C92.7, C92.9-C93.2, C93.7, C93.9-C94.5, C94.7, C95.0- C95.2, C95.7, C95.9
Lung & Bronchus	C34.0-C34.9	162.2-162.5, 162.8-162.9	C34
Non-Hodgkin's Lymphoma	M9590-M9595, M9670-M9677, M9680-M9688, M9690-M9698, M9700-M9717, M9823, M9827	200, 202.0-202.2, 202.8-202.9	C82-C85, C96.3
Oral Cavity (Excluding Lip)	C01.9-C02.9, C07.9-C08.9, C04.0-C04.9, C03.0-C03.9, C05.0-C05.9, C06.0-C06.9, C11.0-C11.9, C09.0-C09.9, C10.0-C10.9, C12.9, C13.0-C13.9, C14.0, C14.2-C14.8	141-149	C01-C14
Prostate	C61.9	185	C61
Skin Melanoma	C44.0-C44.9	172	C43

¹International Classification of Diseases for Oncology

²International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

³International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

Injury Mortality

Injury Mortality Classification	ICD-9 ² (1979-1998)	ICD-10 ³ (1999-2002)
Unintentional Poisoning	E850-E869	X40-X49
Unintentional Burn	E890-E899, E924	X00-X09, X10-X19
Unintentional Transportation	E800-E848, E929.0, E929.1	V01-V99, Y85
Motored Vehicle Traffic	E810-E819	V02-V04 (.1, .9), V09.2, V12-V14 (.3-.9), V19(.4-.6) V20-V28(.3-.9), V29(.4-.9) V30-V79(.4-.9), V80(.3-.5), V81.1, V82.1, V83-V86(.0-.3), V87(.0-.8), V89.2
Unintentional Drowning	E830, E832, E910	V90, V92, W65-W74
Firearm Mortality	E922, E955.0-E955.4, E965.0-E965.4, E970, E985.0-E985.4	W32-W34, X72-X74, X93-X95, Y35.0, Y22-Y24
Homicide and Legal Intervention Mortality	E960-E969, E970-E978	X85-Y09, Y87.1, Y35, Y89.0
Suicide Mortality	E950-E959	X60-X84, Y87.0
Deaths or Injuries from Falls	E880-E886.9, E888	W00-W19
All Other Unintentional Injury	E849, E870-E879, E887, E889, E900-E909, E911-E921, E923, E925-E928, E929.2-E929.9, E930-E949	W20-W31, W35-W45, W49-W60, W64, W75-W81, W83-W94, W99, X20-X39, X50-X54, X57-X59, Y40-Y66, Y69-Y84, Y86, Y88

²International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

³International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

Other Mortality

Mortality Classification	ICD-8 ⁴ (1968-1978)	ICD-9 ² (1979-1998)	ICD-10 ³ (1999-2002)
Heart Disease	390-398, 402, 404-429	390-398, 402, 404-429	I00-I09, I11, I13, I20-I51
Stroke	430-438	430-438	I60-I89
COPD	490-493	490-496	J40-J47
Pneumonia/Influenza	470-486	480-487	J10-J18
Diabetes	250	250	E10-E14
Infectious/Parasitic	001-089, 090-136	001-018, 020-088, 090-139	A00-A09, A15-A19, A20-A39, A40-A41, A42-A49, A50-A53, A54-B19, B20-B24, B25-B99
Chronic liver disease and cirrhosis	571	571	K70, K73-K74
Diseases of arteries, arterioles, and capillaries	440, 441, 442-448	440, 441, 442-448	I70-I78
Diseases of the Kidney and ureter	580-584	580-589	N25-N27
Congenital anomalies	740-759	740-759	Q00-Q99
Certain conditions originating in the perinatal period	760-779	760-779	P00-P96

²International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

³International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

⁴International Statistical Classification of Diseases and Related Health Problems, Eighth Revision

Appendix IV: Iowa Health Data Information Resources

Iowa Health Data Information Resources

ADULT BLOOD LEAD EPIDEMIOLOGY AND SURVEILLANCE: LEAD POISONING PREVENTION PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: rgergely@idph.state.ia.us.

ANNUAL REPORT OF PUBLIC HEALTH NURSING ACTIVITIES: Judy Naber, Center for Public Health Services and Health Improvement, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7016. Fax: (515) 242-6384. E-mail: jnaber@idph.state.ia.us.

BACKFLOW ASSEMBLY TESTER REGISTRATION: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

BARRIERS TO PRENATAL CARE SURVEY: Mary Losch, PhD., Center for Social and Behavioral Research, University of Northern Iowa, Cedar Falls, IA 50614. Phone: (319) 273-2105. Email: mary.losch@uni.edu.

BEHAVIOR RISK FACTOR SURVEILLANCE SYSTEM (BRFSS): Donald Shepherd (BRFSS Coordinator), State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7132. Fax: (515) 281-6475. E-mail: dshepherd@idph.state.ia.us.

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BOARD DISCIPLINARY ORDERS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8th Street, Des Moines, IA 50309. Phone (515) 281-5157. Fax: (515) 281-7969. E-mail: ibde@iowa.gov.

BOARD OF MEDICAL EXAMINERS ANNUAL REPORTS: Ann Mowery, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8th Street, Suite C, Des Moines, IA 50309. Phone: (515) 242-6039. Fax: (515) 242-5908. E-mail: ann.mowery@iowa.gov.

CANCER INFORMATION SERVICE: Contact Joan Felkner, University of Iowa for more details. E-mail: joan-felkner@uiowa.edu.

CARDIOVASCULAR SCREENING PROGRAM DATA: Arlene Johnson, Division of Health Promotion, Prevention and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7097. Fax: (515) 281-4535. E-mail: ajohnson@idph.state.ia.us.

CENTER FOR HEALTH EFFECTS OF ENVIRONMENTAL CONTAMINATION (CHEEC)
Data Management Center (CDMC): Pete Weyer, Center for Health Effects of Environmental Contamination, The University of Iowa, 100 Oakdale Campus N203 OH, Iowa City, IA 52242. Phone: (319) 335-4550. Fax: (319) 335-4747. E-mail: cheec@uiowa.edu.

CENTRAL REGISTRY FOR BRAIN AND SPINAL CORD INJURIES: Mark McMahon, Bureau of Information Management, Iowa Dept. of Public Health, 401 SW 7th Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0321. Fax: (515) 725-0318. E-mail: mmcmahon@idph.state.ia.us.

CERTIFIED OUTPATIENT AND DIABETES EDUCATION PROGRAMS, SUMMARY DATA: Jeanne Clawson, Diabetes Control Program, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6516. Fax: (515) 281-4535. E-mail: jclawson@idph.state.ia.us.

CHILD AND FAMILY HOUSEHOLD HEALTH SURVEY: Lucia Dhooge, Bureau of Family Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7613. Fax: (515) 242-6013. E-mail: ldhooge@idph.state.ia.us.

CHILD HEALTH DATA SYSTEM – CHILD & ADOLESCENT REPORTING SYSTEM (CAREs): Marcus Johnson, Bureau of Family Health, Iowa Dept. of Public Health, 321 E. 12th Street, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6284. Fax: (515) 242-6013. E-mail: mjohnson@idph.state.ia.us.

CHILDHOOD LEAD POISONING PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: rgergely@idph.state.ia.us.

DAY CARE/HEAD START IMMUNIZATION LEVELS: Tina Patterson, Immunization Bureau, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7053. Fax: (800) 831-6292. E-mail: tpatters@idph.state.ia.us.

DEATHS: Diane Boden, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6542. Fax: (515) 281-0479. E-mail: dboden@idph.state.ia.us. Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: jfrance@idph.state.ia.us.

DENTAL HEALTH CENTER DATA REPORT: Bob Russell, Bureau of Oral Health, Division of Health Promotion & Chronic Disease Prevention, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4916. Fax: (515) 242-6384. E-mail: brussell@idph.state.ia.us.

DENTISTS, DENTAL HYGIENISTS, DENTAL ASSISTANTS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8th Street, Des Moines, IA 50309. Phone: (515) 281-5157. Fax: (515) 281-7969. E-mail: ibde@iowa.gov.

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EMERGENCY MEDICAL SERVICES CERTIFICATION DATABASE: Joe Ferrell, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 321 E. 12th Street, Des Moines, IA 50319-0075. Phone: (515) 725-0319. Fax: (515) 725-0318. E-mail: jferrell@idph.state.ia.us.

EMERGENCY MEDICAL SERVICES SERVICE DATABASE: Ray Jones, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 321 E. 12th Street, Des Moines, IA 50319-0075. Phone: (515) 725-0322. Fax: (515) 725-0318. E-mail: rjones@idph.state.ia.us.

FAMILY PLANNING DATA SYSTEM: Kathleen Widelski, Nurse Clinician, Bureau of Family Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4907. Fax: (515) 242-6384. E-mail: kwidelsk@idph.state.ia.us.

FETAL DEATH: Diane Boden, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6542. Fax: (515) 281-0479. E-mail: dboden@idph.state.ia.us. Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: jfrance@idph.state.ia.us.

FLUORIDATED WATER SYSTEMS DATA: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

FLUORIDATION CHECK SAMPLES: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

FLUORIDATION OPERATION REPORTS: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

FLUORIDE STATUS OF COMMUNITY PUBLIC WATER SYSTEMS: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

GAMBLING TREATMENT PROGRAM: Mark Vander Linden, Division of Behavioral Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8802. Fax: (515) 281-4535. E-mail: mvanderl@idph.state.ia.us.

GENERAL ANESTHESIA AND CONSCIOUS SEDATION PERMITS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8th Street, Des Moines, IA 50309. Phone: (515) 281-5157. Fax: (515) 281-7969. E-mail: ibde@iowa.gov.

GOVERNOR'S PRIMARY CARE HPSAs (State Designated): Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: ckulczyk@idph.state.ia.us.

GRADE A MILK CERTIFICATION: Kurt Rueber, Division of Environmental Health, Health Engineering Bureau, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3773. Fax: (515) 281-4529. E-mail: krueber@idph.state.ia.us.

HAZARDOUS SUBSTANCES EMERGENCY EVENTS SURVEILLANCE (HSEES) SYSTEM: Debbi Cooper, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6337. Fax: (515) 281-4529. E-mail: dcooper@idph.state.ia.us.

HAZARDOUS WASTE SITE HEALTH ASSESSMENT PROGRAM: Stuart Schmitz, Environmental Engineer, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8707. Fax: (515) 281-4529. E-mail: sschmitz@idph.state.ia.us OR Sarah Colboth, Health Educator, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-5894. Fax: (515) 281-4529. E-mail: scolboth@idph.state.ia.us.

HEAD/SPINAL CORD INJURY FATALITIES: Kory Schnoor, BS, Brain Injury Program Manager, Division of Behavioral Health & Professional Licensure, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-0926. Fax: (515) 281-4535. E-mail: kschnoor@idph.state.ia.us. Mark McMahon, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6075. Fax: (515) 281-4958. E-mail: mmcmahon@idph.state.ia.us.

HEART DISEASE AND STROKE PREVENTION PROGRAM: Arlene Johnson, Division of Health Promotion & Chronic Disease Prevention, Bureau of Chronic Disease Prevention & Management, Iowa Dept. of Public Health, 321 E. 12th Street, Des Moines, IA 50319. Phone: (515) 281-7097. Fax: (515) 242-6384. E-mail: ajohnson@idph.state.ia.us.

HIV/AIDS REPORTING SYSTEM: Jerry Harms, HIV/AIDS/Hepatitis Surveillance Coordinator, Bureau of Disease Prevention & Immunization, Division of Acute Disease Prevention & Emergency Response, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-5141. Fax: (515) 281-4570. E-mail: jharms@idph.state.ia.us.

HOME CARE AIDE GRANT CLAIMS: Dawn Mouw, Bureau of Local Public Health Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-0919. Fax: (515) 242-6384. E-mail: dmouw@idph.state.ia.us.

HOSPITAL DATABASE: Pierce Wilson or Donald Shepherd, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7132. Fax: (515) 281-6475. E-mail: dshepherd@idph.state.ia.us.

HOSPITAL INPATIENT DATA: Donald Shepherd, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4345 or (515) 281-7132. Fax: (515) 281-6475. E-mail: dshepher@idph.state.ia.us.

IMMUNIZATION LEVELS OF 2-YEAR-OLDS: Marnell Kretschmer, Bureau of Disease Prevention & Immunization, Division of Acute Disease Prevention & Emergency Response, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4917. Fax: (800) 831-6292. E-mail: mkretsch@idph.state.ia.us. Tina Patterson, Bureau of Disease Prevention & Immunization, Division of Acute Disease and Emergency Response, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7053. Fax: (800) 831-6292. E-mail: tpatters@idph.state.ia.us.

INFANT MORTALITY: Xia Chen, Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4068. Fax: (515) 281-6475. E-mail: xchen@idph.state.ia.us.

INFECTIOUS DISEASE: Center for Acute Disease Epidemiology, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6493 or (800) 362-2736. Fax: (515) 281-5698. E-mail: ksoyemi@idph.state.ia.us.

IOWA BIRTH DEFECTS REGISTRY: Paul Romitti, PhD, Director, Iowa Birth Defects Registry, The University of Iowa, 4249 Westlawn Bldg., Iowa City, IA 52242. Phone: (319) 335-8585. Fax: (319) 335-8583. Web site: www.public-health.uiowa.edu/birthdefects.

IOWA EMS SERVICES PROGRAM REGISTRY: Kirk Schmitt, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 321 E. 12th Street, Des Moines, IA 50319. Phone: (515) 281-0437. Fax: (515) 281-0488. E-mail: kschmitt@idph.state.ia.us.

IOWA RADON PROGRAM: Rick Welke, Project Director, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4928. Fax: (515) 281-4529. E-mail: rwelke@idph.state.ia.us.

IOWA SUDDEN INFANT DEATH SYNDROME PROGRAM: Stephanie Pettit, Bureau of Family Health, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone (515) 281-3108. Fax: (515) 242-6384. E-mail: spettit@idph.state.ia.us.

LEAD IN SCHOOLS AND PRESCHOOLS DRINKING WATER TEST RESULTS: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: rgergely@idph.state.ia.us.

LEAD INSPECTOR AND LEAD ABATEMENT CONTRACTOR CERTIFICATION PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: rgergely@idph.state.ia.us.

LICENSED PHYSICIANS: Ann Mowery, Executive Director, Iowa Board of Medicine, Iowa Dept. of Public Health, 400 SW 8th Street, Suite C, Des Moines, IA 50309. Phone: (515) 242-3268. Fax: (515) 242-5908. E-mail: ann.mowery@iowa.gov.

LICENSING AND INSPECTION OF RADIATION MATERIALS: Don Flater, Bureau of Radiological Health, Iowa Dept. of Public Health, 401 SW 7th Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0301. Fax: (515) 725-0318. E-mail: dflater@idph.state.ia.us.

MARRIAGES: Diane Boden, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6542. Fax: (515) 281-0479. E-mail: dboden@idph.state.ia.us. Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: jfrance@idph.state.ia.us.

MATERNAL HEALTH DATA SYSTEM – WOMEN’S HEALTH INFORMATION SYSTEM (WHIS): Stephanie Trusty, Bureau of Family Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6466. Fax: (515) 242-6384. E-mail: strusty@idph.state.ia.us.

MEDICAID BIRTH OUTCOMES: Debra Kane, Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4952. Fax: (515) 242-6013. E-mail: dkane@idph.state.ia.us.

MEDICAID POPULATIONS HPSAs (Federally Designated): (See POPULATIONS HPSAs).

MUAs (Federal Medically Underserved Areas, Federally Designated): Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: ckulczyk@idph.state.ia.us.

NEWBORN HEARING – EARLY HEARING DETECTION AND INTERVENTION (EHDI) Denise Ramsey, Bureau of Family Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 282-5639. Fax: (515) 242-6384. E-mail: dramsey@idph.state.ia.us.

OVERSEAS VACCINE PROVIDERS: Center for Acute Disease Epidemiology, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6493 or (800) 362-2736. Fax: (515) 281-5698. E-mail: ksoyemi@idph.state.ia.us.

PEDIATRIC NUTRITION SURVEILLANCE: Susan Pohl, Bureau of Nutrition and WIC, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4545. Fax: (515) 281-4913. E-mail: spohl@idph.state.ia.us.

POPULATIONS HPSAs (Federally Designated): Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: ckulczyk@idph.state.ia.us.

PHARMACY/PHARMACISTS LICENSING: Diana Pirillo, Board of Pharmacy Examiners, 400 SW 8th Street, Suite E, Des Moines, IA 50309. Phone: (515) 242-5140. Fax: (515) 281-4609. E-mail: diana.pirillo@ibpe.state.ia.us.

POLK COUNTY HEALTHY START PROGRAMING: Mary C. O'Brien, Community Policy Liaison, Visiting Nurse Services, Suite 320, 1111 9th Street, Des Moines, IA 50314. Phone: (515) 558-9981. Fax: (515) 288-0437. E-mail: mary@vnsdm.org.

PREGNANCY NUTRITION SURVEILLANCE SYSTEM (PNSS): Jill Lange, MPH, RD, LD, Community Health Consultant, Bureau of Nutrition & Health Promotion, Iowa Dept. of Public Health, 321 E. 12th Street, 4th Floor, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7095. Fax: (515) 281-4913. E-mail: jlange@idph.state.ia.us.

PREVENTION SERVICE REPORT: Mark Vander Linden, Iowa Gambling Treatment Program, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8802. Fax: (515) 281-4535. E-mail: muanderl@idph.state.ia.us.

PRIMARY CARE HPSAs (Health Professional Shortage Areas, Federally Designated): Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: ckulczyk@idph.state.ia.us.

PROFESSIONAL LICENSURE FILES: Eileen Gloor, Bureau Chief, Bureau of Professional Licensure, Iowa Dept. of Public Health, 321 E. 12th Street, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6385. Fax: (515) 281-3121. E-mail: egloor@idph.state.ia.us.

PUBLIC HEALTH NURSING GRANT CLAIMS: Dawn Mouw, Bureau of Local Health Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-0919. Fax: (515) 242-6384. E-mail: dmouw@idph.state.ia.us.

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RADIOLOGICAL HEALTH: Melanie Rasmussen, Bureau of Radiological Health, Iowa Dept. of Public Health, 401 SW 7th Street, Suite D, Des Moines, IA 50309. Phone: (515) 281-3478. Fax: (515) 725-0318. E-mail: mrasmuss@idph.state.ia.us.

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REGISTERED BACKFLOW PREVENTION ASSEMBLY TESTERS: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

REGISTERED NURSE, LICENSED PRACTICAL NURSE, ADVANCED REGISTERED NURSE LICENSURE RECORDS: Board of Nursing, Iowa Dept. of Public Health, RiverPoint Business Park, 400 SW 8th Street, Suite B, Des Moines, IA 50309. Phone: (515) 281-3255. Fax: (515) 281-4825. Web site: www.state.ia.us/nursing. E-mail: ibde@iowa.gov.

REGISTERED WATER TREATMENT SYSTEMS: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: mmagnant@idph.state.ia.us.

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